utah

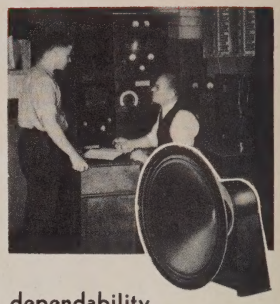
1940

utah RADIO PRODUCTS

- DESIGNED
- ENGINEERED
- MANUFACTURED

TO MEET YOUR REQUIREMENTS

You can use Utah products with full assurance that they will give satisfactory performance. Competent Utah designing keeps abreast of all industry developments. Careful Utah engineering provides maximum efficiency. Precision Utah manufacturing affords maximum economy.



The fact that more than 12 million radio receivers have been Utah equipped by their manufacturers is proof of the uniformity and high quality maintained by Utah, year after year. The continued preference for Utah products, by dealers and service men in all parts of the country, is convincing evidence of their dependability. Insist on Utah-made parts and eliminate loss of time and money.

Utah products are distributed nationally—by recognized jobbers only.

HELPFUL SUGGESTIONS FOR THE USE OF THE NEW UTAH CATALOG

- ORDER ONLY BY STOCK NUMBER. Most products listed in catalog can be shipped approximately 24 hours after receipt of order.
- Note carefully that with the exception of the "R" and "Q" series, all speakers are standard less transformer. The proper transformer is listed below each speaker, making it unnecessary for you to look elsewhere in the catalog for this important data. ADD $1.00 TO SPEAKER LIST IF TRANSFORMER IS TO BE MOUNTED AT FACTORY.
- All "R" and "Q" Speakers are standard with Universal transformers except the R345, Q300, Q345 and the Q500 series. Be sure to designate transformer desired when ordering Q500 series.
- Be sure to give us complete shipping instructions.

THE STANDARD R. M. A. WARRANTY APPLIES TO ALL UTAH PRODUCTS

VOICE COIL IMPEDANCE

The impedance of the voice coil is subject to wide variation over the frequency range. Since it is desirable in most applications to be above rather than below the specified load resistance of the output tube, the voice coil impedance is generally given at 400 cycles, a point which is near enough to the minimum of the impedance—frequency curve for all practical purposes.

It is usually sufficient to increase by 25% the measured d. c. resistance of the coil to obtain the proper impedance value for matching purposes.

This gives a value sufficiently close to the 400 cycle impedance.

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utah SPEAKERS

CONNECTION OF SPEAKERS IN MULTIPLE

In applications in which several speakers are to be operated together, it is preferable to connect them in parallel rather than in series.

This has the effect of making each speaker operate from a low rather than a high impedance source and there is less chance of putting an undue load on the speakers at their resonant frequencies (at which the impedance is high) in case these frequencies differ.

CALCULATING MATCHING IMPEDANCE OF SPEAKERS OPERATED IN PARALLEL

Voice Coil Connections

When two or more voice coils of same impedance are connected in parallel, the combined impedance is calculated in the following way: Divide the individual speaker impedance by the number of speakers to determine impedance of combination. For example—

Voice coil impedance of each speaker.. = 8 ohms
Number of speakers..... = 4
8 ÷ 4 = 2 ohms
Connect speakers to a 2 ohm output.

Unless it is desired to have one speaker handle more power than the other, the voice coil impedances should be within ± 20%. Mis-matching will result in poor tone quality.

Mention should be made that it is not good practice to run low impedance lines (Voice Coils) any considerable distance, as an appreciable audio power loss will be prevalent at the speaker. When working with long lines, minimum attenuation and frequency response losses are offered by lines having impedances between 200 and 500 ohms.

Transformers for the above applications are listed in Transformer Replacement Catalog under heading of "Universal Output Transformers."

Line Transformer Connections

Generally, the line impedance is selected according to the particular installation. To obtain the required individual speaker load impedance, multiply line impedance by number of speakers on the line.

Three examples with amplifier output available in 250 and 500 ohms are as follows—

(1) System using 3 speakers
Amplifier has 250 and 500 ohm output
250 x 3 = 750 ohms
500 x 3 = 1500 ohms
Use 1500 ohm tap on *Line Transformer* and 500 ohm output of amplifier. 750 ohm tap not available on Line Transformer.

(2) System using 7 or 8 speakers
Amplifier has 250 and 500 ohm output
250 x 8 = 2000 ohms
500 x 8 = 4000 ohms
Use 2000 ohm tap on *Line Transformer* and 250 ohm output of amplifier. If only 500 ohm amplifier output available use *Universal Output Transformer*.

(3) System using 15 speakers
Amplifier has 250 and 500 ohm output
250 x 15 = 3750 ohms
500 x 15 = 7500 ohms
Use *Universal Transformer* and either 250 or 500 ohm output of amplifier.

FORCE FACTOR

The best indication of the efficiency of the cone-driving system of a speaker is the so-called force factor which represents the force on the voice coil produced by unit power in the coil. This index takes into account all details of magnetic circuit design and voice coil structure.

While the force factor is only a rough indication of the over-all performance of the speaker, it is a useful criterion in comparing permanent magnet units.

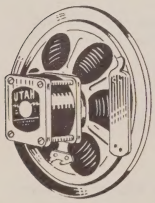
For this reason, all the permanent magnet units are rated in force factor expressed in c. g. s. units.

UTAH HIGH FIDELITY SPEAKERS
PERMO-DYNAMIC MODELS

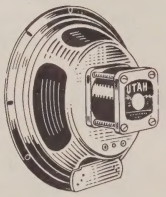
COMPLETELY DUSTPROOFED

Stock Number	Cone Housing Diameter	Magnet Weight	Force Factor	Voice Coil Impedance	Voice Coil Diameter	Normal Wattage	Peak Wattage	Shipping Weight	U. S. A. List Price
E6P	6 Inch	7 Oz.	41	6–8	¾ Inch	4.5	7	2 Lb.	$ 4.25
		Line Transformer No. 8746 for Above Speaker						¾ Lb.	.85
		Universal Plate Transformer No. 8759 for Above Speaker						¾ Lb.	.85
F8P	8 Inch	12 Oz.	48	6–8	¾ Inch	8	12	3 Lb.	6.75
		Line Transformer No. 8747 for Above Speaker						¾ Lb.	.85
		Univ. Plate Transformer No. 8759 for Above Speaker						¾ Lb.	.85
G8P	8 Inch	20 Oz.	60	6–8	1 Inch	10	15	4½ Lb.	8.00
		Line Transformer No. 8749 for Above Speaker						1 Lb.	1.50
		Universal Plate Transformer No. 8760 for Above Speaker						1 Lb.	1.50
H8P	8 Inch	31 Oz.	80	8	1¼ Inch	12	18	6¼ Lb.	11.75
		Line Transformer No. 8752 for Above Speaker						1½ Lb.	1.95
		Universal Plate Transformer No. 8762 for Above Speaker						1½ Lb.	1.95
E10P	10 Inch	20 Oz.	60	6–8	1 Inch	11	17	5¼ Lb.	9.75
		Line Transformer No. 8749 for Above Speaker						1 Lb.	1.50
		Universal Plate Transformer No. 8760 for Above Speaker						1 Lb.	1.50
F10P	10 Inch	31 Oz.	80	6–8	1¼ Inch	14	21	7 Lb.	12.00
		Line Transformer No. 8752 for Above Speaker						1½ Lb.	1.95
		Universal Plate Transformer No. 8762 for Above Speaker						1½ Lb.	1.95
E12P	12 Inch	20 Oz.	60	6–8	1 Inch	13	20	6½ Lb.	12.50
		Line Transformer No. 8749 for Above Speaker						1 Lb.	1.50
		Universal Plate Transformer No. 8760 for Above Speaker						1 Lb.	1.50
F12P	12 Inch	31 Oz.	80	8	1¼ Inch	16	24	8¼ Lb.	14.00
G12P	12 Inch	46 Oz.	97	8	1¼ Inch	17	26	9¾ Lb.	18.50
		Line Transformer No. 8750 for Above Speakers						1½ Lb.	1.95
		Universal Plate Transformer No. 8761 for Above Speakers						1½ Lb.	1.95
GS12P	12 Inch	4 Lb.	104	8	1½ Inch	20	30	12¾ Lb.	27.50
H12P	12 Inch	7 Lb.	117	8	1½ Inch	22	33	15¾ Lb.	33.75
		Line Transformer No. 8753 for Above Speakers						2¼ Lb.	2.25
		Universal Plate Transformer No. 8764 for Above Speakers						2¼ Lb.	2.25
GS15P	15 Inch	4 Lb.	104	8	1½ Inch	22	33	15½ Lb.	29.50
H15P	15 Inch	7 Lb.	117	8	1½ Inch	24	36	18½ Lb.	39.50
		Line Transformer No. 8754 for Above Speakers						2¼ Lb.	2.25
		Universal Plate Transformer No. 8765 for Above Speakers						2¼ Lb.	2.25

NOTE—All Line Transformers Tapped for 500—1000—1500—2000 Ohms.



E6P



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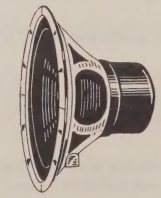
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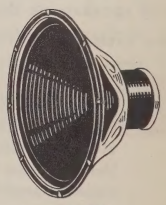

H15P

IMPORTANT INSTRUCTIONS FOR ORDERING REPLACEMENT CONE AND VOICE COIL ASSEMBLIES

In ordering cone replacements, it is absolutely necessary to supply us with all the numbers stamped on the speaker. All speakers are stamped with three sets of numbers, and on many speakers, with the voice coil impedance. One number designates the date on which the speaker was made; one is our catalog stock number; and the third is our production number which gives us the complete specifications of the speaker.

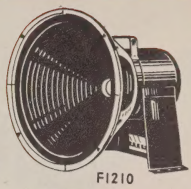
When all the numbers are given on your order, we shall be able to supply the correct cone and voice coil assembly for the designated speaker.

It is also helpful if you can inform us of the voice coil impedance and whether the spider is of the bakelite or corrugated paper construction.

REMEMBER, THE STOCK NUMBER OF THE SPEAKER DOES NOT GIVE US COMPLETE INFORMATION.

UTAH HIGH FIDELITY SPEAKERS
ELECTRO-DYNAMIC MODELS

Stock Number	Cone Housing Diameter	Field Resistance (Ohms)	Voice Coil Impedance	Voice Coil Diameter	Normal Wattage	Peak Wattage	Shipping Weight	U. S. A. List Price
F1210	12 Inch	1000	8	1¼ Inch	16	24	11 Lb.	$10.25
F1225	"	2500	"	"	"	"	"	10.25
F1250	"	5000	"	"	"	"	"	10.25
F12AC	"	110 V. A. C.	"	"	"	"	14 Lb.	17.75
G1210	"	1000	"	1½ Inch	20	30	16 Lb.	16.75
G1225	"	2500	"	"	"	"	"	16.75
G1250	"	5000	"	"	"	"	"	16.75
G12AC	"	110 V. A. C.	"	"	"	"	21 Lb.	25.50
Line Transformer No. 8750 for Above Speakers							1½ Lb.	1.95
Universal Plate Transformer No. 8761 for Above Speakers							1½ Lb.	1.95
G1525	15 Inch	2500	8	1½ Inch	22	33	21 Lb.	$18.75
G1550	"	5000	"	"	"	"	"	18.75
H1525	"	2500	"	"	24	36	23 Lb.	26.50
H1550	"	5000	"	"	"	"	"	26.50
Line Transformer No. 8753 for Above Speakers							2¼ Lb.	2.25
Universal Plate Transformer No. 8764 for Above Speakers							2¼ Lb.	2.25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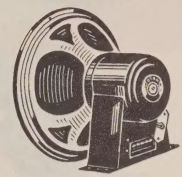
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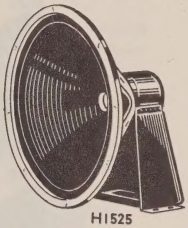
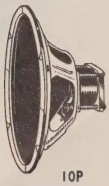

H1525

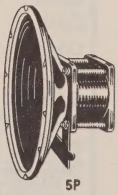
UTAH STANDARD FIDELITY PERMO-DYNAMIC SPEAKERS
COMPLETELY DUSTPROOFED

Stock Number	Cone Housing Diameter	Magnet Weight	Force Factor	Voice Coil Impedance	Voice Coil Diameter	Normal Wattage	Peak Wattage	Shipping Weight	U.S.A. List Price
3P	3½ Inch	5 Oz.	33	3-5	⅝ Inch	2.5	3.75	1 Lb.	$2.70
Single 25L6 Output Transformer No. 8757 (2000 Ohm Impedance) for Above Speaker								½ Lb.	.60
3PY	3½ Inch	1½ Oz.	21	2.5	½ Inch	2.0	3.0	12 Oz.	$1.60
3PZ	3½ Inch	2½ Oz.	25	2.5	½ Inch	2.0	3.0	13 Oz.	1.85
4PY	4 Inch	1½ Oz.	21	2.5	½ Inch	2.5	3.75	13 Oz.	1.65
4PZ	4 Inch	2½ Oz.	25	2.5	½ Inch	2.5	3.75	1 Lb.	1.90
5PY	5 Inch	1½ Oz.	21	2.5	½ Inch	3.0	4.5	13 Oz.	1.75
5PZ	5 Inch	2½ Oz.	25	2.5	½ Inch	3.0	4.5	1 Lb.	1.95
Single Output Transformer No. 8770 (25L6—25L6G—25L6GT—25B6G—35L6GT-48, 2000 Ohm. Impedance) for Above Speakers								½ Lb.	.60
Single Output Transformer No. 8771 (6V6—6V6G—25A6—25A6G—25A7G—43—71A, 4000 Ohm. Impedance) for Above Speakers								½ Lb.	.60
Single Output Transformer No. 8772 (1C5G—1G5G—6A4—6F6—6G6G—6K6GT—20—30—1H4G—31—33—38—89—112A—41—42, 10,000 Ohm. Impedance) for Above Speakers								½ Lb.	.60
Single Output Transformer No. 8773 (1A5G—1F4—1F5G—25,000 Ohm Impedance) for Above Speakers								½ Lb.	.60
5P	5 Inch	5 Oz.	33	6	⅝ Inch	3	4.5	1¼ Lb.	2.75
Line Transformer No. 8755 for Above Speaker								½ Lb.	.85
Universal Plate Transformer No. 8758 for Above Speaker								½ Lb.	.85
6P	6 Inch	5 Oz.	36	6-8	¾ Inch	4	6	1¾ Lb.	3.30
Line Transformer No. 8746 for Above Speaker								¾ Lb.	.85
Universal Plate Transformer No. 8759 for Above Speaker								¾ Lb.	.85
8P	8 Inch	5 Oz.	36	6-8	¾ Inch	7	11	2½ Lb.	4.00
E8P	8 Inch	7 Oz.	41	6-8	¾ inch	7	11	2¾ Lb.	4.50
Line Transformer No. 8747 for Above Speakers								¾ Lb.	.85
Universal Plate Transformer No. 8759 for Above Speakers								¾ Lb.	.85
10P	10 Inch	12 Oz.	48	6-8	1 Inch	9	14	4½ Lb.	6.25
12P	12 Inch	12 Oz.	48	6-8	1 Inch	10	15	5¾ Lb.	8.75
Line Transformer No. 8749 for Above Speakers								1 Lb.	1.50
Universal Plate Transformer No. 8760 for Above Speakers								1 Lb.	1.50

NOTE—All Line Transformers Tapped for 500—1000—1500—2000 Ohms.


10P

E8P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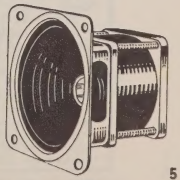
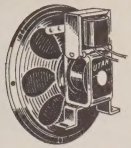

3P

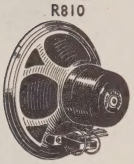
THE FAMOUS
UTAH "R" SERIES OF REPLACEMENT DYNAMIC SPEAKERS

The "R" Series combines maximum performance at lowest possible cost. One size heavier wire used in the field gives higher flux density resulting in better efficiency and damping and purer tone quality.
Bucking coil for "humless" performance used throughout the entire "R" series. Undoubtedly the best speaker value in the industry.

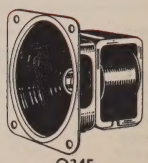
R345

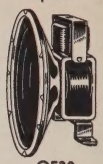

R530

R810


R1210

Stock Number	Cone Housing Diameter	Field Resistance (Ohms)	Voice Coil Diameter	Shipping Weight	U.S.A. List Price
R345	3½ Inch	450	⅝ Inch	1 Lb.	$2.75
R506	5 Inch	6	"	1½ Lb.	3.25
R510	"	1000	"	"	3.25
R518	"	1800 Tapped at 300	"	"	3.25
R530	"	3000 Tapped at 2500	"	"	3.25
R545	"	450	"	"	3.25
R606	6 Inch	6	¾ Inch	2¾ Lb.	3.75
R610	"	1000	"	"	3.75
R618	"	1800 Tapped at 300	"	"	3.75
R620	"	2000	"	"	3.75
R625	"	2500	"	"	3.75
R810	8 Inch	1000	"	5 Lb.	5.25
R815	"	1500	"	"	5.25
R818	"	1800 Tapped at 300	"	"	5.25
R820	"	2000	"	"	5.25
R825	"	2500	"	"	5.25
R1010	10 Inch	1000	1 Inch	7¼ Lb.	7.50
R1015	"	1500	"	"	7.50
R1020	"	2000	"	"	7.50
R1025	"	2500	"	"	7.50
R1210	12 Inch	1000	"	8 Lb.	9.25
R1215	"	1500	"	"	9.25
R1220	"	2000	"	"	9.25
R1225	"	2500	"	"	9.25


Q345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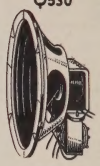

Q810

Q1210

NOTE: Universal Transformers Standard Equipment on Above Speakers except No. R345 (Voice Coil Impedance 3½ Ohm.)
Single 25L6 Output Transformer (2000 Ohm Impedance) No. 8757 for No. R345—U. S. A. List Price 60c (Shipping Weight ½ Lb.).

UTAH "Q" SERIES REPLACEMENT SPEAKERS

Stock Number	Cone Housing Diam.	Field Resistance (Ohms)	Voice Coil Diam.	Shipping Weight	U.S.A. List Price
Q330	3½ Inch	3000	½ Inch	1 Lb.	$2.25
Q345	" "	450	⅝ "	1 "	2.25
Single 25L6 Output Transformer (2000 Ohm Impedance) No. 8757 for Above Speaker				½ Lb.	.60
Q506	5 Inch	6	⅝ Inch	1½ Lb.	2.25
Q510	"	1000	"	"	2.25
Q518	"	1800 Tapped at 300	"	"	2.25
Q530	"	3000 Tapped at 2500	"	"	2.25
Q545	"	450	"	"	2.25
Single Output Transformer No. 8770 (25L6—25L6G—25L6GT—25B6G—35L6GT-48, 2000 Ohm Impedance) for Above Speakers				½ Lb.	.60
Single Output Transformer No. 8771 (6V6—6V6G—25A6—25A6G—25A7G—43—71A, 4000 Ohm Impedance) for Above Speakers				½ Lb.	.60
Single Output Transformer No. 8772 (1C5G—1G5G—6A4—6F6—6G6G—6K6GT—20—30—1H4G—31—33—38—89—112A—41—42, 10,000 Ohm Impedance) for Above Speakers				½ Lb.	.60
Single Output Transformer No. 8773 (1A5G—1F4-1F5G, 25,000 Ohm Impedance) for Above Speakers				½ Lb.	.60
Shipping Weight of Above Transformers				½ Lb.	

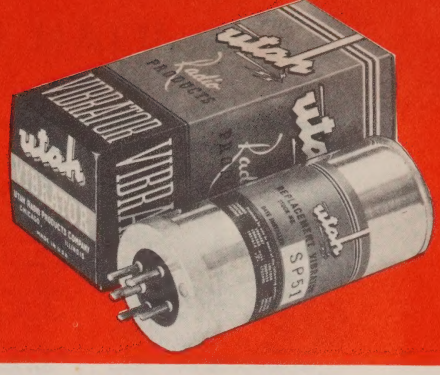
Above Speakers except Q506 Equipped with Mounting Bracket.
Special Triangular Mounting Bracket for Crosley Sets—Stock Number P7705—List Price .25

NOTE: Above Transformers available with Type D. Chassis style mounting at same prices.

Stock Number	Cone Housing Diam.	Field Resistance (Ohms)	Voice Coil Diam.	Shipping Weight	U.S.A. List Price
Q606	6 Inch	6	⅝ Inch	2½ Lb.	$3.40
Q610	"	1000	"	"	3.40
Q618	"	1800 Tapped at 300	"	"	3.40
Q620	"	2000	"	"	3.40
Q625	"	2500	"	"	3.40
Q810	8 Inch	1000	¾ Inch	3½ Lb.	4.60
Q818	"	1800 Tapped at 300	"	"	4.60
Q820	"	2000	"	"	4.60
Q825	"	2500	"	"	4.60
Q1010	10 Inch	1000	1 Inch	5¾ Lb.	6.50
Q1015	"	1500	"	"	6.50
Q1020	"	2000	"	"	6.50
Q1025	"	2500	"	"	6.50
Q1210	12 Inch	1000	"	6¾ Lb.	7.50
Q1215	"	1500	"	"	7.50
Q1220	"	2000	"	"	7.50
Q1225	"	2500	"	"	7.50

NOTE: Universal Transformer—Standard Equipment on Above Speakers.

utah VIBRATORS



UTAH ORIGINATED EVERY MAJOR VIBRATOR IMPROVEMENT

Utah has always been the leader in vibrator design and the recognized and leading source of the radio industry for this part. Well over a million radio sets are equipped with Utah vibrators today. All the well-known Utah qualities of workmanship and design are found in these vibrators, yet they cost no more than ordinary vibrators. Replace with Utah and be sure of a satisfied customer.

Set	Model	Vibrator
ACRATONE		
	49, 51, 92, 92A, 94, 460	
	94A, (Above 500,001)	NL3
	640	SL5
	40 Auto	NP40
	250B, 259B, 260B	NP4
	42D, 43D, 44D, 53D, U6	NP42
	32C, 33C, 167B, 167D, 168B, 168D, K6, L7, X6, Z4, [P402], Z5	SP55
ADDISON		
	531, 631	NL3
	6-Tube DeLuxe Auto	NP42
	N655	SP68
ADMIRAL		
	BA41, L7, X6, X641, Z4, Z5, 512-6D, RPC, 965-6P	SP55
	PH-16, U6, 5F, 55, 69, 78, 88, 780, 880, V6, 950-6A, 965-6A	NP42
AIRCASTLE		
	BA41, L7, X6, Z4, Z5, 330P	SP55
	U6, 14, 1128	NP42
	603	NL3
	661, 660, [3400]	NP62
	[3407]	SP66
	1938 5-tube Auto, Model 211	NP46
	14-129	SP5
AIR CHIEF		
	66	SL5
AIRLINE		
	(Montgomery Ward & Co.) 670, [142]	NP63
	62,130	NL3M
	6B, 62-136, 62-138, [P2153]	32NP42
	32-Volt, Non-Sync. 6-Prong	32NP61
	62-258, [19A26], [19A30], 62-369	SP62
	5Y, 5Y1, 15Y1, 54, 62-199, [P2229]	SP69
	6U, Z651, 199, 202, 62-118, 62-166, [P2080], [P2110], [19A14], [19A16]	NP482
	U6, U66S, 6S, 16S1, 60, 62, 119, 165L, 62-202, 62-236, 62-242, 62-263, [126-1], [19A25]	NP42
	7, 75, 62-327, 62-337, 62-427, 62-437, [19A27], 62-331, 62-441, 1631D to 1639D (R163, R163D), 1641D to 1649D (R164, R164D)	SP7
	87, [P1804], [19A11]. Note transformer must also be replaced	NL3
	102	NP6
	62-750, 62-751, 93BR-564A	NP48
	62-166	NP489
	62-264, 62-280, 62-345, 62-363, 62-466, 62-463, 62-465, 62-650, 62-292, 62-294, 62-356, 62-373, 62-374,62-446,62-651,62-652	SP66
	62-651, 62-652	SP66
	62-280, 62-282, 62-284 Series B	SP633
	62-364	SP640
	62-334	SP645
AIR MASTER		
	31B, 34B, 49B, 50B, 63BC, 63BT, 68BCE, 68BTE, 63B, 73BA, 73B2, 96BCE, 96BTE, 119BC, 119BCT, 130BC, 130BT, 140BC, 140BT	SP56
	100XC,100XT,144XC,144XT	NP485
AIRMATE		
	Buick, Oldsmobile & Pontiac—65	SL5
ALL-AMERICAN MOHAWK		
	See Wurlitzer.	
ALLIED RADIO CORP.		
	See Knight.	
AMRAD		
	F546 [37216]	SP66
ANDREA		
	616, 617, 618 [FM235]	SP5
ARCADIA		
	See Wells-Gardner.	
ARVIN		
	(Noblitt Sparks) 102 (Knight)	NL3
	5, 9A, 19, 22A, 22EM, 28OM, 29, 32, 42, 38, 39, [17-4929], [17-14352], [17-14747], 17A, 17B, 17C, 7, 18FW, 6, 7, 17, 18, 27, 28, 28EM, 33, 37	NP42
	9A, 19	NP48
	10A1, 10A2, 16, 20A, 20B, 25 (1st), 30A, 30B, [29-2169-B], [29-2169-C]	NL3
	15, 25 (2nd), 35, 45 (1st & 2nd Series), [29-4186], [29 4186-B]	NP6
	61B, 62B, 517, 517B, 518B, 527B, 617, 617B, 627B, [17-13187], [17-15589], [17-15831]	SP5
ASSOCIATED RADIO		
	Plug-in (Non-Sync.) 4-Prong	NP42
	32-Volt (Plug-in) 6-Prong	32NP61
ATWATER KENT		
	132, 138, 135Z, 215Z, 256Z, 305Z, 565FF, 565Z,[28449]	32NP61
	237Q, 237Z, 467Q, 126, 136, 416, 446, 556, [31554], [32318], 472	NP42
	424, 534(1st & 2nd), [25595], 816, 826 [26863	SL5
	666, 776, [27005]	NP6
AUBURN		
	(See also Cord)—A5A2	SL5
	A5A3 [6SA4]	SP6
	980525, 980526, [5041376]	SP52
AUDIOLA		
	(Fairbanks-Morse)—A6, 33A6, 33	SL5
	B6, 345, 346, 347	NP61
	C6, 64, 73, 74	NP42
	SD8234, 33S8 (2nd), 816, [14602]	32NL3
	2357(2nd), 33S6(2nd), 33S7 (2nd)	NL3
	23S7 (5-Lead), 33S6 (5-Lead)	SL5
	43C1B, 43T1B, 73C2B, 73T3B, 43, 67, 73, 6717, 6746, 73C3B	SP66
	69-136, 69-138	32NP42
AUDREA		
	610, 611, 612, 613 (C6B), D6B	SP5
	626, 627, 628 (E6B)	SP66
AUTOCRAT		
	(Herbert H. Horn)—6D232	32NL3
	518S, 618S, 23, 24, 505, 530, [505V]	NP42
	5	NL3
	518, 618	NP482
	All 1933—3-Lead—6-Volt	NL3
AUTOMATIC		
	A1, A5, A6, J50, J60, J70, J80, M10, M20, M30, M60, M67, M70, M80, S6, T4, Automaster, DeLuxe, Five, Junior, Jr. Twin Six, Senior, [AV2], [J50], A600, AR-600, A600 Jr. & Sr., Tom Thumb	NL3
	All 1933—3 Lead—12-Volt	12NL3
	All 1936 Plug-in Models	NP42
AUTOPHONE		
	(See Cavalier).	
AUTO-ROLA		
	J50, J60, J70, J80	NL3
AUTOTONE		
	6 Tube	SP66
BALDWIN		
	54, 64	NP42
BALKEIT		
	GT156BA, L7, X6, Z4, Z5, 157BA	SP55
	U6, 54, 64	NP42
BELMONT		
	560, 661, 666, 666A, 666B, 667, 668, Wings [126-1], 505A-566, 567A, 577, 881, 575, 567, [126-5], 677, [126-1], 505, 62-750, 62-751, 62-553, 751, [126-6]	NP42
	566	NP43
	678 [1269]	SP640
	580, 670, 670A, 680, 680A, 680B, 680C, 690, 880, 880A, 880B, 880C, [142-1], [142-4]	NP63
	669—(Head)	NL3M
	408 Household—415A, 415B, 804, [126-4], 489A, 504A, 611, 823A (EX), 408A, 611A, 415, 489, 504, 208, [126-4], X402, 62-552, [1268]	SP66
	6U	NP489
	880D	NP63
	[1269]	SP640
	DE3000, [12610] [1267]	NP47
	823, [126-3]	SP62
	577C, 661B, 676	NP47
BENDIX		
	RP2A (Police)	SP71
BLACKHAWK		
	6U, 64	NP482
BOSCH		
	45, 45A, 45C, 140A, 14-2, 14-3, 150-2, 160 [SA-105499], [SA106450], 140-2, 140-3	SP50
	78, 178	NP6
	79, 79C, 139, 149, 337, 524A, 536B, 634, 634A, 735, 736, 736A2, 737, 737B2, 738, 738A2, 838, 858, [SA106562], [V1955], 139V, 139VC, 139VT, 139VTC, 149V, 149VC, 149VT, 149VTC, 169V, 169VC, 169VT, 169VTC, 524A (1, 2, 2D, 2G)	NP44
	150-1, [SA104601]	SP5H
	189NB (Police, 189HR (Police)	SP71
	536,636,637,[959], [V1951], [V19511]	NP42
	600, 818, [V1957], [V19512]	SP5
BUICK (See General Motors)		
CADILLAC (See General Motors)		
CANADIAN MARCONI		
	6B601, 68684, 577C, (Belmont)	NP47
CANADIAN RADIO CORP.		
	513C, 513DOR	SL5
CAVALCADE		
	54, 64, 359	NP42
	5311, 3511	SP55
CAVALIER		
	(Autophone)—M85T, M85S	NP42
CHAMPION		
	500, 501, 600, 601	NP42
	400	NL3
CHEVROLET (See General Motors)		
CHRYSLER		
	(See Philco—Custom-Built).	
CLARION		
	(Trans. Corp. of America)—AR-100, 110 [P4763], [G-1746], 60, 70, 80, 81 Series (846), 646, 746, 846, 61 Series (646), 71 Series (746), TC50-4 Prong	NP42
	31, 37, 453	SP55
	562, 600, 650, 31, 37 (453)	SP66
	TC15, 100	NL3
	TC50	NP6
CLIMAX		
	66	NP42
	1938 5-Tube Auto	NP46
AKE		SP66
CLINTON		
	801, 802, 803, 804, 805, 806, 807, 808, 809	NP42
	6V6	SP5
COLONIAL		
	106B, [UE-104]	NL3
	1938 & 1939 538, 539, [20159], 593, [20159, R-15187]	NP45
	150 (Non-Sync.), 164B, 240, [R9723], [R10270]	NP6
	134	SL4H
	349, 355, 359, 361, [ML47], [5041245], 349F	SP51
	350, 588[41269-U, R, M], [121388]	NP42
	591, 592, [41263-U, R, M], [1213732, 1213671]	NP487
	1934, 32-Volt Models, [R11207]	32NP61
	434, 439, 440, 441, 444, [R11228], [R15187], [1211594, 595], [1212660], [5050673], 495, 496, 536, [R-16034, 1015116034], 496X, 6101	NP480

Set	Model	Vibrator
	150 [Sync.]	SP50
	[R14840]	SP66
COMMANDER		
	(L 'Tatro)—F83, F283	12SP71
CONSOLE		
	(L 'Tatro)—6A	SP50
CONSOLIDATED		
	51	SL5
CONTINENTAL		
	AZ592, L7, M551, M587, X6, X641, X741, Z4, Z5, Z544, 6P, 7J, 965-6P, [P402]	SP55
	U6, 77, 78, 88, 770, 6D, 7A, 55, 66, 69, 660, 730, 780, 880, 950-6A, 965-6A	NP42
	6D, 7A, 55, 66, 660	NP48
CONTINENTAL RADIO & TELEVISION CORP.		
	6PU	SP55
CORD		
	A245, A255, A455, 136, 137, 138, 540, 641, [5041245]	SP51
CORNELL-DUBLIER		
	3-Lead (Non-Sync.)	NL3
CORONA		
	105, 122, [468]	NP42
	212, 214, [5113]	SP66
CORONADO		
	(Gamble-Skogmo)—6C1, 26R1, 46L1, [19A25], 6L, 566, 677	NP42
	6U, 2551	NP482
	5Y, P2229	SP69
	6JA, 6JB, [19A26], [19A30]	SP62
	6J, [19A30]	SP62
	6C9, [19A33]	SP640
	26B5	32NP42
	31BT, 34BT, 49B, 49BT, 50B, 50BT, 63BC, 63BT, 68BCE, 68BTE, [2269], [3069], [3698], 73BA, 73BT, 96BCE, 96BTE	SP56
	580, 670, 670A, 680, 880C, [142-1], [142-4], 580, [142-4]	NP63
	500	NP44
	660	NL3M
	2605, 6101, [8701]	32NL3
	577, 577-C, 661-B, 676	NP47
	1938 5-tube auto	NP46
	5Y—12-Volt	12SP69
	2651	NP482
	100XC, 100XT	NP485
	489	SP66
	6C7	SP640
	C6, 5C5, 15C6	SP645
	6M2	SP71
	6BK, 6BT, 10V	4SP56
CROSLEY		
	A5A2, 5A1, 98, 99, 101, 102, 103, 119 (6 Volt), 167, [L28949], [L29160], [LB-28064], [W29160]	SL5
	A5A3, A155, 4A1, 5A3, 6B1, 156, 625, [65A4]	SP6
	A156, A157, A167, A177, [G6-38000], [5040000]	NP44
	A266, Roamio Fiver, A168, A196, A258, A267, A268, A368, B587A, B667A, B667M, C159 [W-4492-A]	NP42
	A366	SP51
	B46, 46, 416, 435, 546, 636, 6615, [37216]	SP66
	119 (32 Volt), 159, [228949]	32SL5
	645, 4049 (32-Volt)	32SP6
	A158, A168, A258, A256, A267, A268, A358, 587, 667, 5587, [G10-38000]	NP48
	A166, A255, A355, A455, A555	SP51
	6B1, 625, A155	SP6
	117 Power Pack, 577	4SP66
	[176-G6-38000]	NP480
DE FOREST CROSLEY (Canada)		
	513C, 513D, 51, 510, 513, 510A, 513, 513	SL5
DELCO (See General Motors)		
DE LUXE		
	6-Prong Non-Sync. [3400]	NP62
	6-Prong Sync. [3407]	SP66
DE SOTO		
	(See Philco—Custom-Built)	
DETROLA		
	1100, 1100A	NL3M
	6M, 6R, 1935 Plug-in, 111, 112, 166, 1112, 244, 1938 Models, [294], [2032], [3000], [5766]	NP42
	144B, 144C, [3421], 14-129, 144, 145B, 145CR, 180, 184	SP5
	297, [6735]	SP640
	128, [3421-A]	SP57
	6A	NL3
	1934-1935 Models (3-Lead), 1938]	NL3
	1935 Sync	SP53
	1936 Sync	SP62
DE WALD		
	(See Pierce-Airo).	
DODGE		
	(See Philco—Custom-Built).	
DOMINION ELECTROHOME		
	[K182]	NL3
ECHOPHONE		
	1935 Models	NP42
	Household Models—[F10]	SP66
ELECTRIC AUTO LIGHT		
	(See Also Wells Gardner)	
	C72A, 3729A	SP5H
ELECTRONIC		
	25	NP48
	331, B Eliminator	NL3
	332	32NL3
EMERSON		
	AS179, E, E123, E128, U154, V155, 2A, 6A, [QQV5] [3DV8], [3VV10], F122, F133, F135, F141, G127	NP42
	73B, 77B, 968E	SP5
	60	NL3
	De Luxe 5A (Sync.), [00V4]	SP63
	F7, 34F7, 101F7, 640, 678 (1st) & (2nd), [2KV-6]	SL5
	KS38, 1A, 667, 965, 975	NP6
	P117, P135, [3PV9—4 Volt]	4SP65
	[46V-11]	SP66
EMPIRE		
	60	NL3
ERLA		
	(See Sentinel)	
FADA		
	(Motoset)—101 (RK), 102 (RP), 104, 104B (RV), [4-1252-M]	NL3
	A50, 166, 266, 266SD, 266SF, 266SG, 267, 567SD-SF-SG, X, [90.17], [90.63], 64	NP42
	6-Volt Household, NK (126, 127, 128)	SP56
	C6	SP66
	126, 127, 128, [51298MS], 163 (NK)	SP5
	246, [90.147], 1246	4SP66
FAIRBANKS MORSE		
	(See Also Audiola)—4A, 4B, 6C, 43C1B, 43QB, 73C3B, 73T3B, [806-1], 6CC-2B, 6CT-43, 43 (43T1B), 67 (6717, 6746)	SP66
FEDERATED PURCHASER		
	(See Acratone).	
FERGUSON		
	F205	SP5
	6-Prong	NP6
	75—106A	NP40
FIRESTONE		
	R112, 1121	NL3
	DeLuxe, R132, 1322, [85244]	SP72
	R118, 1182, Trav-ler, [84828], [84904]	NP42
	R131, R133, 54, 64, 1314, 1332, 7425, 7407-6	NP42
	R143, 1431, 1781, [88156], [88157], [110432], 7407-3, 7408-1	NP43
	1131	NL3
	1332 (R133)	NP4
	87424	SP66
	R1322	SP71
	7406-1, 7407-1	SP5
FORD		
	(Including Marconi, Canada)—118, 40-1805, Glove Box Police, Majestic	NL3M
	5601M, Lincoln, Utah Pack, Zenith	NP6
	N, N-FND, FT6, T6	NP41
	816	NP481
	F1440, F1442, F1540, F1542	NP49
	FT9	NP483
	F1740	NP485
	6MF90	NP42
	[40-18839-A, B, C]	NP6
FORDSON		
	FP, 32-Volt (Above 35001)	32NL3
FREED		
	A7, A9	SP5H
FRESHMAN		
	577, 577C, 661B, 676	NP47
GALVIN		
	[48A5333]	NP484
	12-R	32NP48
GAMBLE-SKOGMO		
	(See Coronado).	
GAROD		
	B37	NP42
	2B6, 2B6-1, 3B6, 3B6-3	4SP56
GENERAL		
	801 to 807	NP42
GENERAL ELECTRIC		
	Armrest, B40, B52, C41	SL51
	C60, 6U	NP482
	C61, 123 DeLuxe	SP61
	D50, D51, D52	SP69
	D72, N60, [RV750], [19A25], M58, M60, M68, M69, M602	NP42
	GA62	NP43
	6K, M51, N51, S725, S745, FA-60, FA-61, FA-80, [K11-J994], [RV200], [19A26]	SP62
	U51, U55, [RBV200], [19A28], FB53, FB57, FB73, FB77, [2V-901], [K11J993]	SP66
	FB52, FB56, FB72, FB76	4SP66
	U70, U75, [RBV201], [19A27]	SP7
GENERAL HOUSEHOLD UTILITIES		
	(See Grunow).	
GENERAL MOTORS		
	56V1, 62, 2035, 364441, 4036, 980383, 393 [1206048, 1207758], [5059699]	NL3
	985425, 985536, [1212966, 5057225]	NP42
	631A, 632, 633, 985100,-200, [5040000], 500, 630, 631	NP44
	98255 (2nd Series), 983834, 985200(2nd Series), 983526, 983527, 983844, 983044, 982127, 7238350, 982161, 983679, [7237663], 982127, R673, R675, R676, R677, R678	NP45
	7233966, 7233967, 7232553, 983526, 983527, 983534, 983569, 983570, 983616, 983617, 984424, 982126, 982153, 985252, 985253, 985254, 985255, 985283, 985284, 985285, 985424, 985426, 985537, [1211594, 1211595, 1212660, 5050673, 7233427, 5050673-Q, Y, Z], R640, R641, R642, R643, R644, R663, R664, R665, R666, R667, R668, R669, 982043, -044, -045, -083, -084, -085, 6-3, R673 (Police), 6R, -085, 6-3, R673 (Police)	NP480
	6R, 6U9, [9080, 2120], 6S	NP482
	7238303 [5061036-Y, 1239124]	NP485
	7238301, 983680, [7238829-Q, Y], 982160	NP487
	4037, 4038, [1208000, 152939, 5035120], 60013-249, -565, -566, -749, [1208152, -239, 5035120], 980441, 980445, 980459, 980555, 980455	SL5
	4049, 4050, 4051, [1208115]	32SL5
	1291344, 1291345, 625, 626, 627, 628, 629, 405047, 634, 635, [1209282, 5039661,-757, 5040700, 5041241, 983884, 983885, 405045, 405046, 405057, 405062, 405063, [5037400, 503966], 982006, 982007, 989008, 544245, 544246, 544267, 544268, 544290, 544291, 544297, 544298, [5039661], 983506, 983507, 985400, 544247, 544289 (Above 1,750000), A245, A255, [5041245], 601038, [208614, 503855], 985300, 985301 [5041376]	SP51
	405047, 1291340, 601174, 601176, 601177, 601525, 601574, 601586, 601662, 601814, [5037400, 5039661], 98500 [5041376]	NP49
	985301, 273D [5041376], 980507, -508, -509, -525, -526, -529, 985300	SP52
	980534, 980535, 980566, 980567, 1304873, [81454, 5050498, 7232741], All 1936, 37 and 38 of 980 Series, 980620, 1304873, [131423, 7233419, 130483, 7232741-Q, Y], 104873, 1304874, 1308221, 980598, 7232502	SP54
	072A, A6W (Std.), A6W (Master), 072 (2nd), 2722 (2nd), [P-1765]	SP5H
	601D, 6011, R6012, R6015, [1211375, 5041125, 5050651]	SP56
	3203, 3204, [1208920]	32SP6
	5X, 6J, 6K, 6KB, [19A26, 19A30, 19A31, 1421914, 1427129], 6C, 1425470, 1425471	SP62
	1433970 (8C8)	SP633
	62-118, 62-199	SP69
	983667, [1213446]	SP71
	7406-1, 7407-1	SP5
GENERAL MOTORS (Canada)		
	134, 135	SL5
	136, 137, 138, 540, 640, 641, 985400	SP51
	650, 651, 750, 751	NP42
GENERAL TELEVISION		
	1938 5-tube auto	NP46
GENERAL TRANSFORMER		
	3-Lead, No. 3061 Pack	NL3
GILFILLAN		
	7A, 700, X, 8X	NP6
	X	NL3
	67A, 67R, 77R, 10, 87R	NP42
GLOBE		
	1936 Models	NP42
GOLDENTONE		
	(See Gold Medal).	
	V6	NP42
GOLD MEDAL		
	L7, X6, Z4, Z5	SP55
	TA	SP63
	U6	NP42
GOODRICH		
	50, 60, 65, 80, 90, Wings	NP42
	670	NP63
GOODYEAR		
	(Wings, See Belmont Also). 580, 670	NP63
	661, 667, 101500, 101501, 101502, 1015130, 1015131	NP42
	1010219, 1015110, 1015111, 1015120, 1015121	SP66
	577, 577C, 661B, 676	NP47
	1010219, 1015110, 1015111, 1015120, 105121	SP66
GOVERNOR		
	(L 'Tatro)—N54	32SP5H
	N74	32NP42
GRAHAM		
	(Graham-Paige)—A355, A555	SP51
	G148, G1436	NP49
GRAYBAR		
	150 (Chassis)	SP50
GREBE		
	61R	NL3
GRIGSBY-GRUNOW CO.		
	(See Majestic).	
GRUNOW		
	4NB, 410, 411, 711, [35211]	SP5
	614, 613, [35433]	NP44
	625, [35312], [34373]	SP52
	508, 509, 5AB	NP42
	1936 Household	SP52
GULBRANSEN		
	(See Wells Gardner).	
HALSON		
	56U, 560, 199, Roadmaster 4-Prong—[1857]	NP42
	1199, Roadmaster Sr., Roadmate	NL3M
HARLEY-DAVIDSON		
	560	NP42
	670, Highwayman	NP63
	Police, YA	SP50
	EG45A, M17815	SP66
HERBERT H. HORN		
	(See Tiffany Tone).	
HOWARD		
	HA1, Highwayman, [142-1], [142-2]	NP63
	HA2, 52, 502	NL3
	HA3, HA4	NP4
	HA6, [9600]	SP71
	HA7, HA8, HA9	NP42
	6B, 6BA, 6BT, 7BT	SP55
	68B, [9605], [9605-1], 8742A-43, 6B, 6BB, 6BT, 7BT	SP66
HUDSON-TERRAPLANE		
	CB6, DB27, [80783], DB38, SA37, SA38	SP71
	650, 650HD, 651HE, 660, 660TD, 661TE, Marconi, 660TE	NL3
	H6, 114300, 6680	NP42
	680, 666, 668 [80985]	NP44
	Majestic Head—(Hudson Car Radio)	NL3M
HUPMOBILE		
	(See Philco—Custom-Built).	
IMPERIAL		
	6-Prong (Non-Sync.)	NP63

Set	Model	Vibrator
	Household 6-Volt	SP55
INTERNATIONAL		
(Kadette)—56		SL5
90		NP4
K6, K60, [G100]		NP6
434 [G-131]		SP66
JACOBS		
Household		SP66
JOHN HOLMS		
3-Lead (Non-Sync.)		NL3
KADETTE		
(See International).		
KARADIO		
35, 68, 85, 150, 160, 180, [914], [3261], 55 Police, Sheriff, 757 Sheriff, 65		NP6
56, [1216]		SL5
667		SP5
805, 806		NP42
5P5, 807, 808, 809		NP50
65, 66, 67, 67S, 75, 76, 77, 77S, 88		NP65
KINGSTON		
All 4-Prong Models [E14417]		NP49
All 6-Prong Plug in Models		SP65
KENNEDY		
670, [142-4]		NP63
KENT		
4-Prong		NP42
KNIGHT		
A9728, A9729, A9730, A9776, A9777, A9778, G9751, H9750, L7, X6, Z4, Z5, 25, 46, B10545, A10505 (6P), B10546, B10547, B10548, B10549		SP55
A9780–1–2–3 & 4, B10550–1–2 & 3, H9726, H9766, H9897, U6, A9880 (V6), B10735, B10782, B10784, B10786, B10790, B10791, 6P, A9-724, A9-725, A9-726, V6		NP42
B10575		NP40
A9769, A9770, B10608		SP56
F9515, F9540, F9551, F9737, F9741, G9515, G9517, G9599, G9881, G9882, G9900, F9451, F9541, T		NL3
F9777, G9615, [1381]		32NL3
B10600 to B10604, B10606 to B10611		SP5
66B, 66BE, 68B, 68BE, A9768, A9833 to A9838, B10600		SP56
B10728, B10730, B10732, B10742, B10744, B10780		SP66
6280		SP67
G9875, G9876, H9817, H9876, 6820, 6826		SP68
LAFAYETTE (Nash)		
(See Philco—Custom-Built).		
LAFAYETTE (Wholesale Radio)		
B51		NP4
B52, B62		SP69
B64		32NP42
B90, D37, D45, D46, EB17, EB17A, EB67, JA1, JA2, S9, S79		NP42
C60		NP40
J60, M 44, 9682		SP67
L92—Also replace transformer		NL3
L23, AM20, A60		NP6
L30, 65, 6U		NP482
L17762, S17762		SP5H
LW10		NP51
6-Prong Sync. [3407]		SP66
[3400]		NP62
J60, M44, 25, 480, 9682		SP68
LARKIN		
16, 90, 91		NL3
LA SALLE (See General Motors)		
LAUREHK		
AE5, AE6, AE79, AM6, 66, A37		NP42
LEWOL		
9101, 9102		NL3
9682		SP68
LIEUTENANT GOVERNOR (L 'Tatro)		
L54		32SP5H
L74		32NP42
LINCOLN-ZEPHYR		
L1424–1937		NP6
LION RADIO		
612, [140S113]		SP66
LIONEL		
4-Prong		NP42
L'TATRO		
A255, A525, B525, C625, C925, D625, D925, F725, F925, IN-25, L74, M74, O94, P54, P64, T6216, U5226, V5226, W6236, X6236, Y6236		32NP42
EN6-4		SP66
F, H465, 1455, 1465, J565, J665, K665, 5A		SP50
L54, N54, O84		32SP5H
L, -M, -N4616, O4626, -5636, P, -Q4626, Q5636, R5236, R5636, S5636, S6636, M4616, P4626, Q5636, P4626, S5636		SP68
CQ69, DQ69, NQ69		NP50
CQ69, DQ69		SP5
LYRIC (Canada)		
A60, 69, 460		NL3
MAJASCO		
[V6]		SP55
[V7]		SP63
MAESTRO		
32 V. Household		32SP55
MAJESTIC		
490, 491, 493, Replacement Head		32NL3M
490, 491, 493, Plug-in Vibrator		32NP61
G24, 116A, 116-1, 116-2, 116-3, 118, Replacement Head, Hudson-Terraplane, Twin Six, 66, 118P		NL3M
Utah Pack [40–18839–A, B, C,]		NP6
MALLORY		
VP551, VP552, VP-G556 6-Volt		SP71
Eliminator Types 10 to 14		SP5H
VP-6556—12-Volt		12SP71
MALLORY ELIMINATOR		
Type 60		SP50
MALLORY VIBROPACK		
VP553, VP554, VP555, VP557		NP42
MARCONI (CANADA)		
48		NL3
69, 95, N103		NP42
40, 42		SL51
93, 94		SP6
MATHESON-BELL		
6-34		NP6
MELBURN		
45, 50		NP42
MIDWEST		
Auto Set (3-Lead)		NL3
6-37, 5-36		NP42
7-36, 7-38, 8-38, 12-38		SP5
7-37		SP56
MISSION BELL		
10A, 11, 12, 14, 16, 17, 18, 25A		NL3
638, 638A, 738, 738A, 3716, 3718, -DeLuxe, 3817A		NP42
MONARCH		
U6, YU6, 54, 64		NP42
L7, X6, Z4, Z5		SP55
MONTGOMERY WARD		
(See Airline).		
MOTOMASTER		
611 (Transformer Type)		NL3M
611 (Plug-in)		NP42
DeLuxe [65]		NP62
MOTOSET		
(See Fada).		
9-24		MP485
MOTOROLA (Galvin Mfg.)		
34, 35, 45, 50, 60, 65, 70, 80, 90, 8-30, 8-40, 8-50, 8-60, 8-70, 8-80, "Companion," "Golden Voice," [9404], [3333], [3340], [3552], [38X3333], 44, [943], 55, 55A, F, 15C, 18D, 20P, 21L, 22S, 94K, 25N, 924, 944, 949, 170, 19B, 969, 9-29, 9-39, 19B, 924A, 170		NP484
57, 62, 75, 79, 100, 110, [1784]		NP481
77, [735]		SP5H
Police, Police Cruiser		NP48
Railroad		32NP42
[59H37825]		SP66
9-24		NP485
Dual 6 [D6], Twin 8 [T8] [1062]		NP489
44A, 66, 66A, 77A, 77AB, Super 6 (S6), [942]		SP50
56Y, 56T, 49BR2		SP66
MOTORTONE		
61, 61X [8304], 52		NL3
MUSICAIRE		
31B, 34B, 49B, 50B, 63BC, 63BT, 66BCE, 66BTE, 68BC, 68BT, 5T37, 6CE69, 6TE69, O31CE, O31T, O41BC, O41BT, 911C, 911T		SP56
808, 809T		NP42
5C001, 5T001, 441XC, 441XT		NP485
MUSIC MASTER		
101, 102, ten ten		NL3
NASH-LAFAYETTE		
(See Philco—Custom-Built).		
NOBLITT-SPARKS		
(See Arvin).		
NORTHERN ELECTRIC		
33, 40		SL51
61		NP6
NORTHLAND RADIO (Kartone)		
66A		NP6
1938 5-tube auto		NP46
55B, 58A		NP42
41F, 48F		SP5
OLDSMOBILE		
ORIOLE		
600		SP66
PACIFIC		
H6, H7, 6V, 101B, 101C, 102B, NP42		NP42
80, [480], 21, 22, 23		SP5
101, 102		NL3
1938 Model 211		NP46
682, 9682		SP68
PACKARD BELL		
65, 67, 76, 75, 78, 25		NP42
25		NP6
PACKARD MOTOR CO.		
(See Philco—Custom-Built).		
PACKARD RADIO CO.		
6-Tube Auto		NP42
PARMAC		
6-Volt Household		SP55
76		SP66
PATHFINDER		
3060		NL3
PATTERSON		
78B, 79B, 80B (Chassis 77B, 77BA), 168, 268		SP5
PHILCO (Transitone)		
5, 6, 7, 8, 9, 10, 10(122), 11, 11(122), B, C, D, D(122), E, G, G(122), H, H(122), J, N, Q, R, A-PAB, B-PBD, CGD, EF, EG, J-NJD, Q-NQD, Q-SQD, R-HRD, C(121)-NCD, C(122)NCD, D(122)-NDD, H(121)HHD, H(122)-HHD, H(122)PHD, [38-5036], NT3, RT3, ST3, 700, 800, 800(122), 802, 805, 806, 808, 809, [38-5036], DP121, DP122 Police, DPV, DP, E122, F19X, G(121), LT14X3, LT14X4, MED, MED(122), NT7, NT8, NT12X, NT12X2, PBD, R(122), SCD, SCD (122), SDD, SJD (122), ST7, T2, T3, T5, T6, T9, T11, T12, T14, T15, 810PA, 810PB, 810PV, HRD, 122-(R122), J122(NJD122), J122(SJD122), DP, 811PA, 811PB, 811PV, AC206, AC206(122), AC236, AC266, AC289, AC289(122), AC1089, AC1189, AC-1289, AC1989, C(NCD), C(SCD), C122(SCD122), CGD(G), CGD122 (G122), CRD(R), CRD122 (R122), CT2, CT5, C122 (SED122), D(NDD), D(SDD), D122(NDP-122), E(MED), E122(MED-122), FNID(N), FT6, G(CGD), G122(CGD122, HGD122), HGD122(G122), H122 (HHD122, PHD), HRD, B6, C (122), CDS, D, (AC989-122)		NP41
624, 624B, 624H, 624R, [41-2015]		SP60
816, 816B, 816C, 816P, [41-3186]		NP483
38-35, (121), 38-40 (121), 38-35, 38-40		NP48
817, 817B, 817C, 817P, 818, 818K, 819, 819H, 826, 827, 827K, 828, 828K, 926, 927, 928K, [41-3170], C1450, C1452, F1540, F1442, G1418, G1436, L1420, L1424, L1425, L1427, L1429, L1460, N1518, N1433H, N1434H, N1514, P1417, P1430, P1432H, R1415, W1419, S1416, S1431, S1437, 1421P		NP49
PT14X, T9, T10, T11, T12, T12X, T1r, T14X, T15, T15X, HT11X, N-FND, CT10		NP483
821P, 821V (Police), [41-3315], 819		NP64
37-34, 37-624, 38-39, [41-3222]		SP66
920, [41-3398], 921, 922, 933, 938K		NP484
38-34(125), 38-624(121)		SP66
PHILCO—Custom-Built		
Chrysler & Chrysler Airflow—CA, CB, CGD, CU, CV, CZ, D, G, G(122), R, C1, C2, C3, C6, T2, T5 Custom-Built, CT, CT5, CV (122)		NP41
CT2, CT10, CT11		NP483
C9, C10, C11, C14, C15, C16, C17, C1540, C1542, C1550, C1423, C1452, C1608		NP49
C1708		NP485
C1608		NP484
25C6		SP645
DeSoto & DeSoto Airflow—G (122) SE, SF, SG, 5G, CT2, CT5		NP41
CT5, CT10, CT11		NP483
S3		NP49
Dodge CGD, DR, DS, (G122), DU, CT2, CT5, E		NP41
D5, D6, D7, C1452		NP49
Ford—N, N-FND, FT6, T6		NP41
FT9		NP483
F1440, F1442, F1540, F1542		NP49
F6040, 38-35, 38-40, 920, 921, 922		NP42
F1640		NP484
Graham—G1418, G1436, G1578		NP49
Hupmobile—G, H, G(122), H(122) R, T2		NP41
HT11X		NP483
Lincoln Zephyr 41460, L1560, L1660, L1420, L1424, L1425, L1427, L1429		NP49
LT14X3, LT14X4		NP483
Nash-Lafayette—C, D, C(122), D(122), J, Q, 110, AC989, AC989(122), AC1089, AC1189, AC12 9, AC1989, N2D, S2D, D(989), NCD (C), NDP (D), NDD122 (D122), NJD (J) NJd122 (J122), NT7, NT8, NQD (2) DP (122), DP (DP122), Police, DPV, 8C (AC989)		NP41
AC3789, AC4389		NP42
T7, T8		NP483
N1418, N1433, N1433H, N1434H, N1514, N1524		NP49
AC3789		NP48
NT12X, NT12X2, NT15, NT15X		NP483
AC4389		SP66
AC3689		SP71
Packard—B, H(122), PB, PHD, PT5, T5, PBD, PHD (H122), PHXD2 (N2D, S2D), RCRD, HRD, R122, (CRD122, HRD122) S2D (2), T2, T6, 5, 6F, 1D(122), 1D, 11, 11-(122), 700, 800, 8 (122), 802, 805, 806, 808, 809		NP41
P1417, P1421, P1422, P1426, P1430, P1439H, P1439, P1535, P1517, P1530, P1617, P1630, P1635		NP49
PT14		NP483
Pierce-Arrow—E, ME, MT3, T3, Med (E), Med 122 (E122), (EC10), MT14X4		NP41
517R		NP42
Plymouth—CGD, G, G(122), PE, PF, PJ, SF, SG		NP41
P3, P4		NP49
Reo—RT3(5485), T3, DeLuxe—RT14X		NP41
Studebaker—D, J, Q, ST3, T3, AC206, AC236, AC266		NP41
S1416, S1431, S1437, S1516, S1526, S1626		NP49
ST12, ST15		NP483
Willys-Overland—W1419, 817, 817B, 817C, 817P, 818, 818K, 819, 819H, 826, 827, 827K, 828, 828K, 926, 927, 928K		NP49
PHONOLA (Canada)		
3A61, 3A62		NL3M
6V82E, 6V92D, 6V92P, 6V92S		SP5
PICKWICK		
All Models		NL3
PIERCE-AIRO		
(DeWald)		
(United Scientific)		
A604, A605, 517, 527, 605, 606, 607, 617, 702, [8463], [8608]		NP42
A606, A607LW (6-Volt), 608		NP40
Motortone, 61, 61X, [8304], 52		NL3
640, [8409]		NP51
MT14X4		NP483

Set	Model	Vibrator
PIERCE-ARROW		
(See Philco—Custom-Built).		
PILGRIM		
	DB, DF, DFE	SP55
PILOT		
	G56, G57, 253(2nd), 255-(2nd)	SP5
	253(1st), 255(1st), [85X]	SP67
	253(3rd), 255(3rd)	SP66
	605	NP42
	A53-1st, 255-1st	SP68
PLA-PAL		
	185, [F10]	SP66
PLA-RIGHT		
	500	NP44
PLYMOUTH		
(See Philco—Custom-Built).		
PONTIAC		
POWERTONE		
	500	NP44
PRESIDENT (L'Tatro)		
	O84	32SP5H
	O94	32NP42
R. C. A. VICTOR		
	AR4229, DeLuxe, M34, M105, M116 (Arm Rest), [7604], [7694]	SL51
	BC6-6, BT6-5, RS66, RS166, [80429]	SP56
	CV8, 6BK, 6BK6, 6BT, 6BT6, 8BK, 8BK6, 8BT, 8BT6, [11656], [80429-4-5], [81270]	4SP56
	EG37A1, M101, M104, M108, RC166, [7857], [68916], 1B23914	SP69
	H6, 63, 67M, [5067], [80985], [80092], 82B, 82BK, 9M1, 9M2, RC357A, M50, M60	NP42
	M109, RS61, RS63-1	NP4
	8M, 8M1, 8M2, 9M1, 9M2, 67M	NP48
	M107, [68690], [7780]	NP489
	M123, [7757]	SP61
	5M, 6M, 6M2, 8M3, 8M4, 67M1, 67M2, 67M3, [19236], [80783], 6B6, DB37, M112754, 8M3	SP71
	84BT6, 85BT6, R283, [81657], RC283, RC316, 94BT6, 94BT61, 96BK6, 96BT6	SP64
	M17815, EG45A	SP66
	12-Volt—M101, M104, MO9	12SP69
	12-Volt—M107	12NP482
RADIART		
	B Eliminator—3310	NL3
	3311, 3312, 3314	NP6
	3316	32NP61
	4200	NP42
RADIART VIPOWER		
	4200B, 4200CF, 4202	NP42
	4201	SL52
RADIETTE		
	54, 64	NP42
RADIO PRODUCTS		
	L7, X6, Z4, Z5 [P402]	SP55
	U6, 54, 6D, 7A, 46, 55	NP42
	6D, 7A	NP48
RADOLEK		
	K16743, K16746, K16704, N16704	SP55
	K16748, K16749	SP5
	K16780	SP56
	K16825	NP42
	10968 Household	32NL3
RECORDER (L'Tatro)		
	P54, P64 (Household)	32NP42
RELIANCE		
	L7, X6, Z4, Z5	SP55
	U6	NP42
REMINGTON		
	U6	NP42
REMLER		
	27, 35	NL3
	38	NP6
REO		
(See Philco—Custom-Built).		
REPUBLIC		
	56C, 56T, 76C, 76T	SP55
ROGERS (Canada)		
	918	SL5
SEARS ROEBUCK		
(See Silvertone).		
SENTINEL (Erla)		
	7M, 10M, 10MF, 11M, 111, 112, [1893], [1974], [4105]	NP40
	31B, 31B72, 31B74, 34B, 34B71, 34B74, 34M73, 49B, 50B, 63B, 63BC, 63BT, 63BCE, 66BTE, 68BC, 68-BCE, 68BT, 68BTE, [2269], [2970], [3069], [3698], [1211375], [5050651], 66BCE, 66BCT, 66B, 73BA, 73BT, 78B, 96BCE, 96BTE, 119BC, 140BT, 119BCT, 130BC, 130BT, 140BC	SP56
	500, 503, 560, 600, 601, 602, [95>5], [9536], 603, [31245]	NL3
	5500, [1187]	NP4
	5600, [1381]	32NP42
	6100, 6101, 6102, [8701]	32NL3
	4400, [1140]	SP50
	100X	NP42
	100XC, 100XT, 144XC, 144XT	NP485
	88BE, 119B, 130B, 130BE, 140B, 140BE	SP5
	66BE, 68B, 68BE	SP66
SERENADER (Canada)		
(See Phonola).		
SETCO		
	(Setchell-Carlson)—40, 41, 50, 51, 52, 410, 510	SP5
	44, 45, 60, 60S, 66, 66S, 68, 68S, 70, 70S, 71, 71S, 80, 605, PA6, 61, 62, 67, 77, 87, 221, 225, 610, 620, 621, 622, 630	NP50
SHELLEY		
	65, 67, 75, [V16]	NP42
SHERIDAN		
	5-Tube	NL3
SILVER MARSHALL		
	Hallicrafters	NP6
	6-Volt Household [1045113]	SP66
	Hallicrafters	NP63
SILVERTONE		
	(Sears-Roebuck)—556, 666, 1869, 1869X, 1949, 3400, 4405, 4407, 4428, 4448, 4450, 4548, 4550, 7157, 7167, [105V], 4406, 4614 (101497), 4651(101497), 4700, 7123, 1871, 4528, 6073, 6074, 6079, 6173, 6218, 6271, 6272, 7128-4 Prong	NP42
	1855 (6-Prong)	32NP61
	1855 (4-Prong)	32NP42
	1859, 1859A, 7117, [1140]	SP50
	8A6, 4400, 107HA62, 4400A	SP71
	4128 (4-Prong), 7128 (4-Prong)	NP4
	4128(6-Prong), 7128(6-Prong), 7149-6 Prong	NP6
	4418, 4419, 4421, 4430, 4434, 4441, 4451, 4459, 4519, 4521, 4559, [1045113], 740 (101476), 4405A (104127), 4433 (10427), 4448A (104127), 4453 (104127), 4428A, 4548A, 4640, 4650, 4740, 4750 (101476), 7128A, 4613, 4622, 4623, 4643, 4722, 4723, 4743, 6005, 6070, 6071, 6072, 6076, 6077, 6170, 6171, 6172, 6176, 6210, 6214, 6270	SP66
	4600, 4601, 6100, 6101 [1211594], [1211595], 6000, 6001	NP480
	678-A, 602, 7068, 7068A	NL3
	7063, 7088, 7149	NL3M
	6104	NP48
	7223	SP55
	1924, 1934	SP56
SIMPLEX		
	DB, DBK, DF, DFK, FB, GB, GBE, PB, PBT, XDB, 5DB, 1935T, [V4]	SP55
	O, 1935 (Non-Sync.)	NP42
	T	NL3
	TA (1st & 2nd Series), T-2, [V-7]	SP63
	P32, 1933 PF, 1934 PF	32NL3
SKY-RANGER		
	500, [5040000]	NP44
SKY-ROVER		
	577, 577C, 661B, 676	NP47
SOBOL		
	6C1, [19A25], 6C2	NP42
SPARTON		
	676, 686, D686, [A12726], [A12750]	NP42
	33, 33A, 33B, 333, [B5417], 535	NL3
	33 (Sync.), 33A (Sync.), 36, [A10345]	SL5
	637-6, 687-6, [A14344], 638-6, 688-6	SP5
	H686	NP42
	9930	SP69
SPIEGEL		
	186, 5300, 6800	NP42
	L7, Z5, 144, 152, 167, 178, 182, 183, 4400, 4404, 4420, 4452(6C-75)	SP55
	5200, 5210, 5214, 5216(651)	SP66
	9930 (25Y)	SP69
	2212 to 2215, 2254 to 2257, 2280, 2281(14SE), 5218, 6712, 6716, 6766, 6772	SP5
STAR		
	6U	NP482
STARLINE		
	V6B	NP42
	4252	SP55
STEINWAY		
	3-Lead (Non-Sync.)	NL3
STEWART RADIO		
	50, 60	NL3
STEWART WARNER		
	R112, 1121, 1123 [8337], 1122	NL3
	R118, R133, 1132, 1181, 1182, 1183, 1332, [83800], [84828], [84904], 1171, 1172(R117), 1183(R118)	NP4
	K117, R131, 1311 to 1319, 1332 (R133), R118 (1181, 1182, 1183)	NP42
	R132, 1332 [85244]	SP72
	R143, R160, R178, 1431, 1601 to 1609, 1781, [88156], [88157], [110432], R173, R1781, 1871 (R187), 3211, 3212 (321)	NP43
	R163, R163D, R164, R164D, 1631D to 1639D, 1641D to 1649D, [89272]	SP7
	R189	SP67
	195	SP56
	[89868], [110800]	SP66
	R191D (1911 to 1919), R192D (1921 to 1929)	SP5
	1891 (R189)	SP68
ST. REGIS		
	K6, K60, [G-100]	NP6
STROMBERG-CARLSON		
	33, 33A, 33X, 34, [P23466]	SP5H
	115, [P25993], [26028]	SP5
STUDEBAKER		
(See Philco—Custom-Built).		
	S1726	NP485
SUPERTONE PRODUCTS, INC.		
	L7, X6, Z4, Z5	SP55
	U6, 54, 64	NP42
TATRO		
(See L'Tatro).		
TEMPLETON		
	5-Tube Super	NL3
TERRAPLANE		
	(Also See Hudson)—DB-37	SP71
TIFFANY TONE		
	535, 536, 537, 538, 557	NP6
TIGER		
	26S1	NP482
	270, 270A, 670, 670A	NP63
TRANSFORMER CORP. OF AMERICA (TCA)		
(See Clarion).		
TRANSITONE		
(See Philco).		
TRAV-LER		
	54, 64, 542, 601, 610, 642, 660, 670, 710, 711	NP42
	76, 173, 176, 525, 733	SP66
	1934 Models, 1935 Models	NP4
TRIANGLE		
	6P	SP71
TRAYLER		
	179, 180, 680	NP42
	600, 650, 179, 180, 679, 680	SP66
TROPIC-AIRE		
	O6W	SP5H
TROY		
	TR86, TR87	NP6
	68	NP42
TRUETONE (Western Auto)		
	D732, D733, O6Z, S757, V6Z2, Also Replace Transformer, S732, S733, Z6Z1, O62(3rd), [P-1926], 65, 6V	NL3
	D735, S735, 5Y, 25Y1, [P2229]	SP69
	D736, D739, D741, D742, 580, 670, 670A, 678A, 680, 749, 880, [142-1], [142-4]	NP63
	D737, D737B, D737C, D740-(Wells-Gardner), D743, D743W, D744, R131, S743, 666, 1311, 1312, [126-1], [19A25], [84905], D746 Series A (Issue ABC), DE-3000 Issue A, D747 Series A (Issue A, B, C), D976 Issue A	NP42
	178	32SP5H
	D745, S745, 6J, 6K, [19A26], [19A30]	SP62
	L7, X6, Z4, Z5, D718, D708	SP55
	S737, S737C, 6R	NP4
	612, [1045113], 408 Household	SP66
	577, 577-C, 661-B, 676	NP47
	D709, D717 (6 Volt-110 Volt)	NP48
	6S, 6U, S740, [P2080], [P2110] [19A14], [19A16]	NP489
	D740, 670	NP6
	O6W	SP5H
	D719	SP5
	D978	SP62
	D706	SP66
	D748	SP645
TRUEVALUE		
	6U	NP482
ULTRAMAR		
	345, 355	SP66
UNITED AMERICAN BOSCH		
(See Bosch).		
UNITED MOTORS (Delco)		
	B-101, 2035, 4036 [1207758]	NL3
	66	NL3M
	3203, 3204 [1208920]	32SP6
	4037, 4038, [1208000], [5035120]	SL5
	4049, 4050, 4051, [1208115]	32SL5
UNITED MOTORS—Delco—Continued		
	405047, [5037400], [5039661]	SP51
	98252, 98253, 98254, 98255, 983526, 983527, 980244, 983834, 985200 (2nd Series)	NP45
UNITED SCIENTIFIC		
(See Pierce-Airo).		
UNIVERSAL BATTERY CO. (Clinton)		
	60, 70, 80, 801, 802, 803, 804, 805, 806, 807, 8232, 8332	NP42
	6180, 7286	SP55
	50A6	SP66
UTAH		
	B Eliminators (Non-Sync.)	NL3
	32-Volt	32NP42
	Majestic Pack	NP6
WARWICK		
	Sync. Models	SP62
	5T Auto, 6T Auto, 511, 618, [3400]	NP62
	550, 560, 646, 660, 665, [30-100], 846	NP42
	611	NP4
	1934 (J. Holms), [3403]	NL3
	1935 & 1936 (6-Volt) Household	SP5
	651, [3407], 562, 600, 751, 453, 700, 761, 746, 846	SP66
	1938 5-tube auto	NP46
	453	SP55
WEBSTER		
	Amplifier (6-Volt)	SP55
WESTERN AUTO		
(See Truetone).		
	6P, [P-402]	SP55
WELLS-GARDNER		
	V6Z2, V622, Z6W1, Z6Z1, O6Z, [P1804], [19A11], Also Replace Transformer	NL3
	Z6U1, 6C1, 6L, 6N, 6P, 6R, 46C1, 46C1-41, 61, [19A25], Z6R1	NP42
	O6W(1st), O6W(2nd), O6X, O72, O72A, 172, 3722A	SP5H
	5H, 5K1, 65H, [19A28]	SP66
	SX, 6J, 6K, 6KB, 46J3, [19A26], [19A30], [19A31], C5, 6C7	SP62
	5Y, 25Y1, [P2229]	SP69
	6B, 26B1, 26B5, 26R1, 36D510, 36D560	32NP42
	7Q, 7S, [19A27]	SP7
	5Y (12-Volt)	12SP69
	Z6U1	NP482
	6S (26S1), 6U(26U1), [P2110], [19A14], [19a16]	NP489
	106S2-714, 106S2-768	SP66
	6C7, 6C9, 38C7, 36C11	SP640
	5C10, SP642	SP641
	C6A, 6CB, 5C6, 15C6, C6, C7	SP645
	7P	SP7
WESTERN AIR PATROL		
	78(W832), 4B132(5406), 4B231(5409), 4B313(5410), 4B314, 4B317(5411), 4B355(5410, 4V59(5405), 6B164(5635), 6B231(5653), 6V62(5621), B2A, S2-5H	SP66
WESTINGHOUSE		
	A43, A44, WR33, WR41, WR42	SL51
	WR25, WR26, WR501, [ZV3]	NP6
	WR27	NP63
	WR260	NP4
	WR502, WR503	NP42
	602	SL5
	WR500, WR501	NP44
	WR603, WR606, WR610	SP5
WHOLESALE RADIO		
(See Lafayette).		
WILCOX-GAY		
	3R6	NP63

Set	Model	Vibrator
	4B6, 4B6-2, 5F8, 5F8-790, 5F8-890, Roadmate'[1332-A], A5, A6(5F8)	NP6
	Roadmate	NL3
WILLYS-OVERLAND	(See Philco—Custom-Built).	
WILSON	32-Volt Household	32NL3
	1936 Models (4-Prong)	NP42
WINGS	(See Goodyear)	
WURLITZER	(All American Mohawk)—A60, 460, [Y4288-RA]	NL3
	U50, U500	SL5
ZENITH	4B106, 4B131, 4B132, 4B231, 4V31, 4V59, 6B107, 6B129, 6B164, 6V27, 6V59, 6V62, [190-5], [190-6], 5409, 4B313 (5410), 4B314, 4B317 (5411), 4B355,(5410), 6B231 (5635), 6B321(5635)	SP66
	4F133, 5F134, 5F166, [190-8], 5407, 4SP66, 5M291, 6M292, 6M293, 6M294, 8M295, 666, 668, 680, [190-4], [190-13], 5M90 (5510), 5527, 5M294(5530), 5650, 6M390 (Ford), 633, 664 (5510), 5626, 5617	NP44
	5J217, 5J247, 5J255, 5M90, 5M191, 6J230, 6J257, 6M90, 6M90D, 6M90S, 6M91D, 6M91S, 6M92, 6M192, 6M193, 6M194, 7J232, 7J259, 7M91D, 7M91S, 8M195, 663, [190-7], [190-9], [190-11], 6J322, 6J357 (5654), 5630, 7J323, 7J368 (5715), 7M916 (5706), 5J217T (5524T), 7J232T, 7J259T (5711T), 7M910 (5706), 660, 666, 668 (5616, 5626), 672	NP42
	460, 462, 650HD, 651HE, 660TD, 661TE, [190-1], [190-2], 2047, 650 (2057)	NL3
	7, 7 (Jr.), 664 (Ford), [P7142-1], [40-18839-A, B, C]	NP6
	190-12	32NP42
	Chassis Numbers—2057	NL3
	5404, 5405, 5406, 5621, 5635	SP66
	5510, 5520, 5524, 5610, 5615, 5631, 5632, 5637, 5642, 5711, 5803	NP42
	5518	4SP66
	5616, 5645, 5805	NP44
	SM90 (5510), 63-4 (551D)	NP43
ZEPHYR RADIO CO.	(See Also Lincoln-Zephyr). 20B6, 21B6, 22B6, 20P6, 21P6, 22P6 [Z6]	SP62
	3M5, 3M7, 3M8	NP42
	2M7	NL3
	DB, DF, GB, GBE, 20A6, 20B6, 20P6, 21A6, 21B6, 21P6, 22A6, 22B6, 22P6	SP55
	TA	SP63

NOTES AND EXPLANATION

Manufacturers Original Vibrator Part No. is Indicated thus—[120-12].

COMPARISON CHART

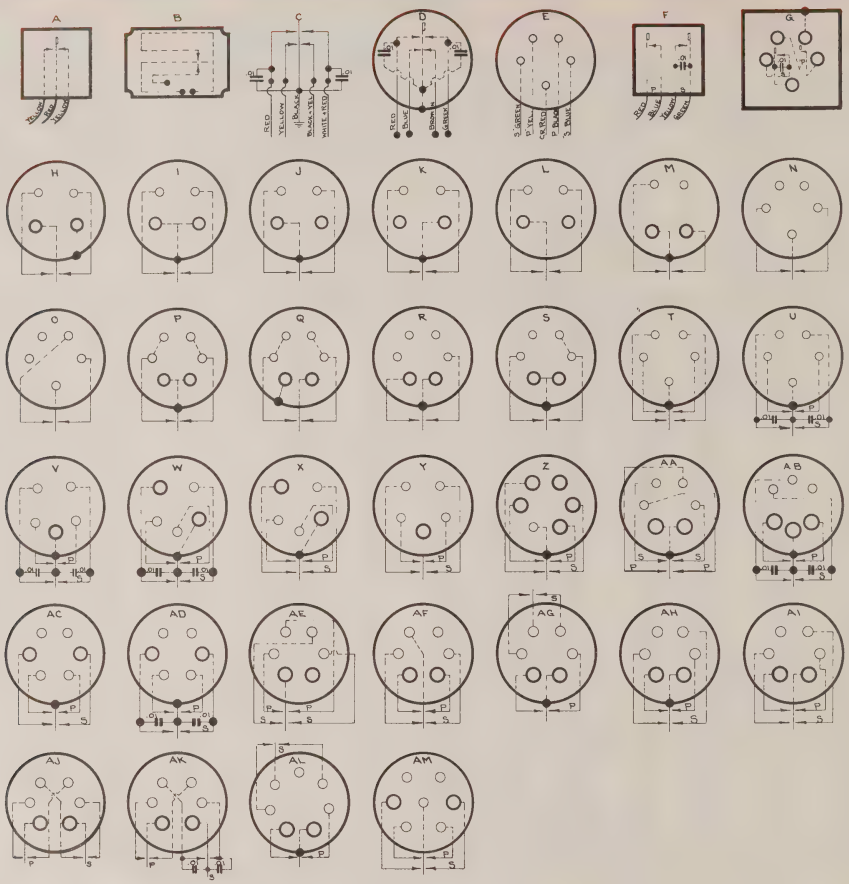
Radiart	Utah	Radiart	Utah	Radiart	Utah	Radiart	Utah	Mallory	Utah	Mallory	Utah	Mallory	Utah	Delco	Utah
2742	NL3	3461	SP51	4318	NP62	5331	NP43	210	SP5H	253Y	NP44	508P	NP484	5039661	SP51
2743	NL3	3463	32SP5H	4320	NP63	5333	NP45	211	SP5H	253	NP489	510P	NP48	5039757	SP51
2747	NL3	3481	32NP61	4402	SP5	5334	NP45	212	SP5H	F253	32NP482	514	SP54	5040000	NP44
2819	NL3	3503	32NP6	4403	SP56	5335	NP487	213	SP5H	G253	12NP489	715	SP54	5040700	SP51
2819-32	32NL3	3588	32NL3	4404	32SP6	5339	NP480	214	SP5H	270B	SP50	716	SP54	5041125	SP56
2864	NL3	3607	32SL5	4414	SP72	5340M	NP484	F211	32SP5H	271	SP50	722A	SP64	5041245	SP51
2867	NL3	3608	32NL3	4415	SP61	5341M	NP484	219	SP5H	271HD	SP50	725	SP71	5041376	SP52
3200	NL3	3651	32SP56	4415-12	12SP61	5342M	NP485	220B	NL3M	273	SP50	G725	12SP71	5042240	NP41
3223	NP6	3679	SP55	4416	SP66	5365	NP65	F220C	32NL3M	273C	SP51	728A	SP64	5042703	NP49
3225	32NL3	3741	NP40	4417	4SP56	5400	SP62	221	NL3	273D	SP52	825	NP42	5043853	SP52
3227	NL3	3782	NP42	4500	SL5	5404	SP633	F221	32NL3	275	SP50	F826	32NP48	5050498	SP54
3260	NP4	3786	NP51	4501	SP63	5405	SP55	222	SL5	275XS	SP68	850	NP48	5050651	SP56
3261	NP6	3806	NP42	4502	SP50	5406	SP71	223	SL5	277S	SP63	851	NP45	5050673	NP480
3262	NP40	3815	NP481	4504	SP52	5406-12	12SP71	F223	32SL5	281	SP56	852	NP480	5052370	SL51
3263	NP6	3842	NP481	4505	SP50	5407	SP641	224	SP61	285	SP56	853	NP44	5052374	NP6
3264	NP482	3848	SL5	4607	SL4H	5409	SP5	225	SL5	P285Y	SP60	854	NP43	5052378	NP42
3283	SP50	3850	SP63	4608	SP68	5409-32	32SP5	226	SL5	W285	4SP56	860	NP45	5052525	SP66
3290	SL4H	3865	NP44	4610	SP5H	5409-4	4SP5	230	SP5H	285XS	SP67	901M	NP484	5052538	NP481
3299	NP6	3880	NL3	4611	SP52	5410	SP55	231	SL4H	286S	SP69	902M	NP484	5052869	SP69
3300	NL3	3883	SP69	4612	SP66	5411	SP66	234	SL4H	G286S	12SP69	903M	NP485	5053179	SP53
3302	NP6	3888	NP40	4613	SP51	5413	SP56	235	SL4H	287M	SP69	951P	SP66	5053181	SP6
3308	SL5	3883-12	12SP69	4614	SP51	5415	4SP56	236	SP5H	G287M	12SP69	952W	SP645	5053183	SP55
3313	NL3	3989	SP6	5300	NP42	5420P	SP66	237	SP5H	289Y	SP72	953W	SP640	5053185	SP71
3315	SL5	4253	NP42	5301	NP485	5421	SP66	245	SP5	292	NL3	954	SP633	5053501	SP5
3317	SL5	4253-12	12NP42	5303	NP480	5422	SP7	245A	SP56	F292	32NL3			5053699	SP62
3318	SP5H	4253-32	32NP42	5304	NP50	5426	SP54	F245	32SP5	294	NP42				NL3
3319	SL51	4254	SL52	5305	NP42	5427	4SP66	W245	4SP5	294C	NP480				
3320	NP41	4254-12	12SL52	5306	NP6	5428	SP60	W245A	4SP56	F294	32NP42				
3356	NP61	4254-32	32SL52	5310	NP42	5430	SP64	245C	SP55	294SW	NP43				
3375	NL3	4255	SP71	5312	NP6	5431	4SP65	246	SP66	296	NP6				
3395	32NP48	4255-12	12SP71	5313	NP48	5434	SP64	246P	SP66	297	NP61				
3397	32NP61	4255-32	32SP71	5320	NP49	5435	SP66	W246	4SP66	F297	32NP61				
3398	NL3	4257	SP72	5321	NP44	5437	SP645	247	SP6	299	NP63				
3399	NP482	4257-12	12SP72	5322	NP41	5438	SP640	F247	32SP6	500P	NP41				
3417	NP482	4257-32	32SP72	5323	NP483	5439	SP66	248	SP62	501P	NP44				
3417-12	12NP482	4260	NP4	5325P	NP484	5439-12	12SP66	249	SP71	503	NL3				
3442	NL3M	4301	NP482	5326P	NP485			F251	32NP489	504	NP62				
3445	SP5H	4313	NP482	5327P	NP48			253T	NP481	505P	NP49				
3460	32NL3M	4314	32NP61	5330	NP4			F253	32NP482	507P	NP483				

Delco	Utah
1206048	NL3
1207758	NL3
1208000	SL5
1208115	32SL5
1208152	SL5
1208239	SL5
1208920	32SP6
1209282	SP51
1211375	SP56
5035120	SL5
5037400	SP51
5038055	SP51

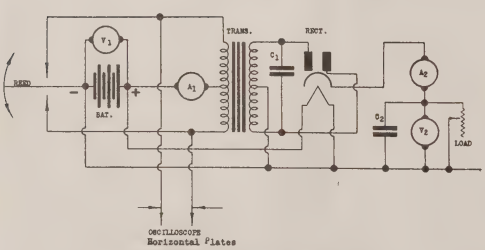
PRICE LIST — HOOK-UP — DIMENSIONS OF UTAH VIBRATORS

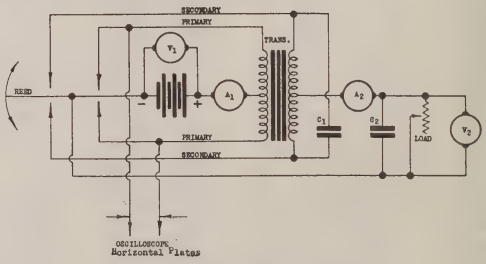
Stock Number	Size	Base Code Letter	U.S.A. List Price	Stock Number	Size	Base Code Letter	U.S.A. List Price	Stock Number	Size	Base Code Letter	U.S.A. List Price
NL3	1 9/32x1 7/16x2 13/32	A	$3.45	NP50	1 1/2x3 1/8	N	3.45	SP6	1 1/2x3 1/8	Z	4.95
NL3M	15/16x1 31/32x3 1/2	B	3.95	NP51	2x3 9/16	O	3.45	SP60	1 5/8x3 5/8	AA	4.95
NP4	1 1/2x3 1/8	I	2.95	NP6	1 1/2x3 1/8	P	2.95	SP61	2 1/4x4 5/8	AB	7.00
NP40	1 5/8x3 5/8	I	3.45	NP61	1 1/2x3 1/8	Q	$3.95	SP62	1 1/2x3 1/8	AC	4.95
NP41	2 1/4x4 3/4	J	2.95	NP62	1 1/2x3 1/8	R	3.95	SP63	2x4 1/2	AD	5.95
NP42	1 1/2x3 1/8	J	2.95	NP63	1 1/2x3 1/8	S	3.95	SP64	2x3 9/16	AE	4.95
NP43	1 1/2x3 1/8	K	2.95	NP64	2x3 9/16	R	3.95	SP65	1 1/2x3 1/8	AG	5.50
NP44	1 5/8x3 5/8	J	2.95	SL5	1 9/32x1 7/16x2 13/32	C	5.50	SP66	1 1/2x3 1/8	AH	4.95
NP45	1 1/2x3 1/8	M	2.95	SL51	2x4 3/16	D	5.95	SP67	2x4 1/2	AJ	7.00
NP46	1 1/2x3 1/8	L	2.95	SLH (see SL4H)				SP68	2x4 1/2	AK	7.50
NP47	1 1/2x3 1/8	J	2.95					SP69	2x4 1/2	AC	5.50
NP48	1 1/2x3 1/8	L	2.95	SL4H	1 9/32x1 7/16x2 13/32	F	5.95	SP633	1 1/2x3 1/8	AF	4.95
NP49	2x3 9/16	J	2.95	SL52	1 1/2x3 1/8	E	4.95	SP640	1 1/2x3 1/8	AC	4.95
NP480	1 5/8x3 5/8	M	2.95	SP5H	2 1/4x2 7/16x5 1/4	G	7.50	SP641	1 1/4x2 7/8	AC	4.95
NP481	2x4 1/2	I	3.95	SP5	1 1/2x3 1/8	T	4.95	SP645	1 1/4x2 7/8	AC	4.95
NP482	2x4 1/2	I	3.95	SP50	2x4 1/2	U	5.95	SP7	1 1/2x3 1/8	AL	5.50
NP483	1 5/8x4 3/4	J	2.95	SP51	2x4 1/2	V	5.50	SP71	1 1/2x3 1/8	AM	4.95
NP484	1 1/2x3 1/8	J	2.50	SP52	2x4 1/2	W	5.50	SP72	1 5/8x3 5/8	AM	4.95
NP485	1 1/2x2 13/16	J	2.50	SP53	2x3 9/16	U	5.95	4SP5	1 1/2x3 1/8	T	4.95
NP487	1 1/2x2 7/8	M	2.95	SP54	2x3 9/16	X	4.95	4SP56	2x3 9/16	T	4.95
NP489	2x4 1/2	H	3.95	SP55	1 1/2x3 1/8	Y	4.95	4SP65	1 1/2x3 1/8	AG	5.50
NP491	1 1/4x3 1/8	J	2.95	SP56	2x3 9/16	T	4.95	4SP66	1 1/2x3 1/8	AH	4.95
NP65	1 1/4x3 1/8	P	2.95	SP57	1 1/2x3 1/8	T	4.95				

See Notes "A" and "B" on above 12, 24 and 32 volt vibrators. (Bottom page 17.)



VIBRATOR TESTER CIRCUIT





NON-SYNCHRONOUS

Trans.—Utah No. 2152 Vibrator Transformer
Rect.—6X5G Rectifier Tube
Load—5000 Ohm 25 Watt Rheostat
C_1 —.008 M. F. 1600 V. Buffer Condenser
C_2 —8 M. F. 450 V. Electrolytic Condenser
A_1 —0-10 Ammeter, D.C.
A_2 —0-100 Milliammeter, D.C.
V_1 —0-10 Voltmeter, D.C.
V_2 —0-500 Voltmeter, D.C.

SYNCHRONOUS

Trans.—Utah No. 2152 Vibrator Transformer
Load—5000 Ohm 25 Watt Rheostat
C_1 —.01 M. F. 1600 V. Buffer Condenser
C_2 —8 M. F. 450 V. Electrolytic Condenser
A_1 —0-10 Ammeter, D.C.
A_2 —0-100 Milliammeter, D.C.
V_1 —0-10 Voltmeter, D.C.
V_2 —0-500 Voltmeter, D.C.

NL3

ACRATONE—(See Also Federated Purchaser)—49, 51, 92, 92A, 460, 94, 94A (Above 500,001).
ADDISON—531, 631.
AIR CASTLE—603.
AIRLINE—87, (Note Transformer Must Be Replaced Also).
ARVIN—10A1, 10A2, 16, 20A, 20B, 25(1st), 30A, 30B, A1102 (Knight 6 Tube). Morse)—23S7(2nd), 33S6(2nd),
AUDIOLA—(Fairbanks Morse)—23S7(2nd), 33S6(2nd), 33S7(2nd).
AUTOCRAT—(Herbert H. Horn)—5, All 1933—6 Volt —3-Lead.
AUTOMATIC—A1, A5, A6, J50, J60, J70, J80, M10, M20, M30, M60, M67, M70, M80, S6, A600, AR600, A600 Jr. & Sr. Tom Thumb, T4, Automaster, DeLuxe, Five, Junior, Jr. Twin Six, Senior.
AUTO-ROLA—J50, J60, J70, J80.
CLARION—(Trans. Corp. of America)—TC15,100.
COLONIAL—106B.
CORNELL-DUBLIER—3-Lead (Non Sync.).
DELCO—(See Also Chev., Buick, Olds., Pont., & United Motors)—2035, 4036.
DETROLA—1934-1935 Models (3 Leads).
DOMINION ELECTROHOME—[K182].
ELECTRONIC—331, B Eliminator.
EMERSON—60.
EMPIRE—60.
FADA—(Motoset)—101(RK), 102(RP), 104, 104B(RV).
FIRESTONE—R112, 1121, 1131.
GENERAL MOTORS—364441, 980383, 980393. 56V1, 62.
GENERAL TRANSFORMER—3-Lead, No. 3051 Pack,
GILFILLAN—X.
GREBE—61R.
HOWARD—HA2, 52, 502.
HUDSON-TERRAPLANE—650, 650HD, 651HE, 660, 660TD, 660TE, 661TE, Marconi.
JOHN HOLMS—3-Lead (Non Sync.).
KNIGHT—F9451, F9515, F9540, F9541, F9551, F9573, F9737, F9741, G9515, G9517, G9599, G9881, G9882, G9900, T.
LAFAYETTE—(Wholesale Radio Service Co.)—L22. (Also Replace Transformer.)
LARKIN—16, 90, 91.
LEWOL—9101, 9102.
LYRIC—(Canada)—A60, 69, 460.
MARCONI—(Canada)—48.
MISSION BELL—10A, 11, 12, 14, 16, 17, 18, 25A.
MIDWEST—Auto Set (3-Lead).
MOTORTONE—61, 61X, 52.
MUSIC MASTER—101, 102, Ten-Ten.
PACIFIC—101, 102.
PATHFINDER—3060.
PICKWICK—All Models.
PIERCE-AIRO—(De Wald) 61, 61X, 52.
RADIART—B Eliminator, 3310.
REMLER—27, 35.
SENTINEL—(Erla) 500, 503, 560, 600, 601, 602, 603.
SHERIDAN—5 Tube.
SILVERTONE—(Sears Roebuck)—602, 678-A, 7068A, 7068.
SIMPLEX—Model T.
SPARTON—33, 33A, 33B, 333, 535.
STEINWAY—3 Lead—Non Sync.
STEWART RADIO—50, 60.
STEWART WARNER—R112, 1121, 1122, 1123.
TEMPLETON—6 Tube Super.
TRUETONE—(Western Auto)—D732, D733, S757, O6Z, V6Z2, S732, S733, Z6Z1, O62(3rd), S740, 6S, 6V. Transformer must also be replaced.
UNITED MOTORS (DELCO)—V-101, 2035, 4036.
UTAH—B Eliminator—(3-Lead Non Sync.).
WARWICK—1934 (J Holms).
WELLS GARDNER—V6Z2, V622, Z6W1, Z6Z1, O6Z. Transformer must also be replaced.

NL3 —continued

WILCOX GAY—"Roadmaster."
WURLITZER—(All American Mohawk)—A60, 460.
ZENITH—460, 462, 650HD, 651HE, 660TD, 661TE. 2047, 650 (2057). Chassis Number—2057.
ZEPHYR RADIO CO.—2M7.

NL3M

AIRLINE—62, 130.
BELMONT—660—(Head).
COLONIAL—164.
CORONADO—(Gamble-Skogmo)—660.
DETROLA—6A, 1100, 1100A.
FORD—118, 40-1805, Glove Box, Police, Majestic.
HALSON—1199, Roadmaster Sr., Roadmate.
HUDSON-TERRAPLANE—(Majestic Head) For (Hudson Car Radio).
MAJESTIC—66, G24, 116A, 116-1, 116-2, 116-3, 118, 118P. Hudson-Terraplane, Twin Six.
MOTOMASTER—611 (Transformer Type).
PHONOLA—(Canada)—3A61, 3A62.
SILVERTONE—7063, 7088, 7149.
UNITED MOTORS—(Delco)—66.

NP4

ACRATONE—250B, 259B, 260B.
FIRESTONE—R118, 1182, 1332 (R133), "Trav-ler."
HOWARD—HA3, HA4.
INTERNATIONAL—(Kadette)—90.
LAFAYETTE—(Wholesale Radio)—B51.
R. C. A. VICTOR—M109, RS61, RS63-1.
SENTINEL—(Erla)—5500.
STEWART WARNER—R118, R133, 1171, 1172(R117), 1132, 1181, 1182, 1183,
TRAV-LER—1934 & 1935 (4 Prong) Models.
TRUETONE—(Western Auto)—S737, S737C, 6R.
WARWICK—611.
WESTINGHOUSE—WR260.

NP40

ACRATONE—Model 40 Auto.
ARVIN—(Noblitt Sparks)—7, 17A, 17B, 17C, 18, 18FW, 27, 28, 33, 33DM, 37.
FERGUSON—75-106A.
KNIGHT—B10575.
LAFAYETTE—(Wholesale Radio)—C60.
PIERCE-AIRO—(De Wald)—(United Scientific)—A606, A607LW (6 Volt), 608.
SENTINEL—(Erla)—7M, 10M, 10MF, 11M, 111, 112.

NP41

FORD—(Including Marconi, Canada)—N, N-FND, FT6, T6.
LINCOLN-LINCOLN ZEPHYR—LT14X3.
PHILCO—(Transitone)—5, 6, 7, 8, 9, 10, 10(122), 11, 11(122), B, C, D, D122, E, G, G(122), H, H(122), N, Q, R, A-PAB, B-PBD, CGD, EF, EG, J-NJD, QNQD, Q-SQD, R-HRD, C(121)NCD, C(122)NCD, D(122)NDD, H(121)HHD, H(122)PHD, MT3, RT3, ST3, DP121, DP122 Police, DPV, E(122), FT9X, G(121), LT14X3, LT14X4, MED, MED(122), NT7, NT8, NT12X, NT12X2, PBD, R(122), SCD, SCD(122), SDD, SJD(122), ST7, T2, T3, T5, T6, T9, T11, T12, T14, T15, 810PA, 810PB, 810PV, HRD, 122(R122), J(SJD), J122(NJD122), J122(SJD122), DP, 811PA, 811PB, 811-PV, AC206, AC206(122), AC236, AC266, AC289, AC989(122), AC1089, AC1189, AC1289, AC1989, C(NCD), C(SCD), C122(SCD122), CGD(G), CGD122 (G122), CRD(R), CRD-122(R122), CT2, CT5, C122(SED-122), D(NDD), D(SDD), D122(NDP122), E(MED), E122 (MED122), FND(N), FT6, G(CGD), G122(CGD122, 700, 800, 800(122), 802, 805, 806, 808, 809. HGD122), HGD122(G122), H(HHD), H122(HHD122, PHD), HRD, B6, C(122), CDS, D(AC989 Code 122).
PHILCO—(Custom Built).

NP41 —continued

CHRYSLER & AIRFLOW—CA, CB, CGB, CGD. CU, CV, CZ, D, G, G(122), R, C1, C2, C3, C6,T2, T5, (CT, CT5), CV (Code 122). Custom Built Chrysler.
DE SOTO & AIRFLOW—C(122)SE, SF, SG, CT5, CT10, CT11.5G(CT2, CT3).
DODGE—CGD, DR, DS(G122).DU, (CT2, CT5), E.
FORD—N, N-FND, FT6, T6. (Center Control).
HUPMOBILE—G, H, G(122), H(122), R, T2.
LINCOLN-LINCOLN ZEPHYR—LT14X3.
NASH-LAFAYETTE—C, D, D(122), J, Q, 110, AC989, AC989(122), AC1089, AC1189, AC1289, AC1989, NT12X, NT12X2, NT15, NT15X. SQD, D(AC989). NJD(J), NJD122(J122), NT7, NT8, NQD(Q), DP-(122), DP(DP122) Police, DPV, BC(AC989), NQD, NCD(C),NDP(D),NDD122(D122),
PACKARD—B, H(122), PB, PHD, PT5, PBD, PHXD, RCRD, HRD, R122(CRD122, HRD122), SQD(2), Q(NQD, SQD), T2, T5, T6, 5, 6F, 10(122), 10, 11, 11(122), 700, 900, 9(122), 802, 805, 806, 808, 809.
PIERCE-ARROW—E, ME, MT3, T3. E(10), 1 MT MED(E), MED122(Elqq), 14X4.
PLYMOUTH—CGD, G(122), PE, PF, PJ, SF, SG.
REO—RT3 (5485), T3 REO DE LUXE—RT14X.
STUDEBAKER—D, J, Q, ST3, ST12, ST15, T3, AC206, AC236, AC266.

NP42

ACRATONE—42D, 43D, 44D, 53D, U6.
ADDISON—6-Tube De Luxe Auto.
ADMIRAL—PH-16, U6, 5F, 55, 69. 78, 88, 780, 880,
CC V6, 950-6A, 965-6A.
AIRCASTLE—U6. 14-1128.
AIRLINE—U6, U66S, 6S, 16S1, 60, 62, 119, 165L, 62-202, 62-236, 62-242, 62-263.
ARVIN—5, 9A, 19, 22A, 22EM, 280M, 29, 32 42, 38, 39. 6, 7, 17, 18, 27, 28, 28EM, 33, 37.
ASSOCIATED RADIO—Plug-in (Non Sync.).
ATWATER KENT—237Q, 237Z, 467Q, 126, 136, 416, 446, 556. 47Q.
AUDIOLA—C6, 64. 66, 73, 74.
AUTOCRAT—518S, 618S, 23, 24, 505, 530.
AUTOMATIC—All 1936 Plug-in Models.
BALDWIN—54, 64.
BALKEIT—U6, 54, 64.
BELMONT—560, 661, 666, 666A, 666B, 667, 668. 505A, 566, 567A, 577A, 881, 575. 677 [126-1]. 567 [126-5]. 505, 62-750, 62-751, 62-553, 751 [126-6]. 415, 489, 504, 208 [126-4]. X402, 62-552, 1268. [1269]. 823 [126-3]. DE-3000 [12610] [1267]. Wings.
BOSCH—536, 636, 637.
CAVALCADE—54, 64, 359.
CAVALIER—M85T, M85S.
CHAMPION—Model 5. 500, 501, 600, 601.
CLARION—AR-100, 110 60, 70, 80, 81 Series(846), 61 series (646), 71 series (746), TC50 4-Prong. 646, 746, 846,
CLIMAX—66.
CLINTON—801, 802, 803, 804, 805, 806, 807.808, 809
COLONIAL—350. 588 [41269-U, R, M] [121388].
CONTINENTAL—U6, 77, 78, 88, 770. 6D, 7A, 55, 66, 69, 660, 730, 780, 880, 950-6A, 865-6A.
CORONA—105, 122.
CORONADO—(Gamble-Skogmo)—6C1, 26R1 46L1, [19A25]. 6L, 566, 677.
CROSLEY—A266, "Roamio Fiver."A168, A196, A258, A267, A268, A368, B587A, B667A, B667M, C159. [W-4493-A].
DETROLA—6M, 6R, 1935 Plug-in, 111, 112, 166, 244, 1112, 1938 Models.
ECHOPHONE—1935 Models.
EMERSON—AS179, E, E123, E128, U154, V155, 2A, 6A. F122, F133, F135, F141, G127.
ERLA-SENTINAL—100X. 66, 266, 266SD, 266SF,

NP42—continued

FADA—(Motoset)—A50, 166, 266, 266SD, 266SF, 266SG, 267, 267SD, 267SF, 267SG, 267X.
FAIRBANKS-MORSE—C6, 64, 74.
FIRESTONE—R131, R133, 54, 64, 1314, 1332.7425, 7407-6.
FORD—6MF90.
GAROD—B37.
GENERAL—801, 802, 3, 4, 5, 6, 7,
GENERAL ELECTRIC—D72, N60.M58, M60, M68,)2. M69, M602.
GENERAL MOTORS—985,425,[1,212,966][5057,225] 985536.
GENERAL MOTORS (Canada)—650, 651, 750, 751.
GILFILLAN—67A, 67R, 77R, 10, 87R.
GLOBE—1936 Models.
GOLD MEDAL—U6.
GOLDEN TONE—V6.
GOODRICH—50, 60, 65, 80, 90, "Wings."
GOODYEAR (Wings)—661, 667, 101500, 101501, 101502, 101530, 101531.
GRUNOW—508, 509, (5AB).
HALSON—56U, 560, 199, "Roadmaster" 4 Prong.
HARLEY DAVIDSON—560.
HOWARD—HA7, HA8, HA9.(670A).
HUDSON-TERRAPLANE—H6, 666, 668.114300, 6680.
KARADIO—805, 806.
KENT—4 Prong.
KNIGHT—A9780, 1, 2, 3 & 4; B10550—1, 2 & 3; H9726, H9766, H9897, U6. A9880(V6), B10782, B10735, B10784, B10786, B10790, B10791, 6P, A9-724, A9-725, A9 726, V6.
LAFAYETTE—(Wholesale Radio)—B90, D37, D45, D46, EB17, EB17A, EB67, JA1, JA2, S9, S79.
LAUREHK—AE5, AE6, AE79, AM6, 66, A37.
LIONEL—4 Prong.
MALLORY—Vibrapack VP553, VP554, VP555, VP557
MARCONI—(Canada)—69, 95, N103.
MELBURN—45, 50.
MIDWEST—6-37.5-36.
MISSION BELL—638, 638A, 738, 738A, 3716, 3718, De Luxe."
MONARCH—U6, YU6, 54, 64.
MOTOMASTER—611 (Plug-in).
MUSICAIRE—808, 809T.
NASH-LAFAYETTE—AC3789.
NORTHLAND RADIO (KARTONE)—55A, 58A.
PACIFIC—H6-37, M7-38. H6, H7, 6V, 101B, 101C, 102B.
PACKARD BELL—65, 67, 76. 75, 78, 25.
PACKARD RADIO CO.—6-Tube Auto.
PHILCO (CUSTOM BUILT)—NASH—AC4389.
PHILCO—F6040 (Ford), 38-35, 38-40, 920, 921, 922.
PIERCE-AIRO—(DeWald)—(United Scientific)—A604, A605, 517, 527, 605, 606, 607, 617, 702. 517R.
PILOT—605.
R. C. A. VICTOR—H6, 8M, 8M1, 8M2, 63, 67M. 8QB, 8QBR, 9M1, 9M2, RC357A, M50, M60.
RADIART—B Eliminator 4200. Vipower 4200B, 4200CF, 4202.
RADIETTE—54, 64.
RADIO PRODUCTS—U6, 54. 6D, 7A, 46, 55,
RADOLEK—K16825.
RELIANCE—U6.
REMINGTON—U6.
SETCO—(Setchell-Carlson)—67, 77, 89.
SHELLY—65, 67, 75.
SILVERTONE—(Sears Roebuck)—556, 666, 1869, 1869X, 1949, 3400, 4405, 4407, 4428, 4448, 4450, 4548, 4550, 7157, 7167. 1949A, 4406, 4614(101497), 4651 (101497), 4700, 7123, 1871, 4528, 6073, 6074, 6079, 6173, 6218, 6271, 6272, 7128—4 Prong.
SIMPLEX—Q, 1935 (Non Sync.).Q(378001UP).
SOBOL—6C1. 6C2.
SPARTON—(Sparks Withington)—676, 686, D686.H686.
SPIEGEL—186, 5300, 6800.

NP42—continued

STARLINE—V6B.
STEWART WARNER—R117, R131, 1171, 1172, 1311 to 1319. 1332(R133), R118(1181, 1182, 1183).
SUPERTONE PRODUCT CO., INC.—U6, 54, 64.
TRAV-LER—54, 64, 542, 601, 610, 642, 660, 670, 179, 180, 680. 710, 711.
TROY—68.
TRUETONE—(Western Auto Sup.)—D737, D737B, D737C, D744 (Wells Gardner) D743, D743W, D744, R131, S743, 666, 1311, 1312. DE3000 Issue A, D746 series A(IssueA,B,C), D976 Issue A. D747 Series A(Issue A,B,C),
UNIVERSAL BATTERY CO.—(Clinton)—60, 70, 80, 801, 802, 803, 804, 805, 806, 807.8232, 8332.
WARWICK—550, 560, 646, 660, 665. 846.
WELLS GARDNER—Z6U1, 6C1, 6L, 6N, 6P, 6R, 46C1, 46C1-41. 61. Z6R1.
WESTINGHOUSE—WR502, WR503.
WILSON—1936 Models (4-Prong).
ZENITH—5J217, 5J247, 5J255, 5M90, 5M191, 6J230, 6J257, 6M90, 6M90D, 6M90S, 6M91D, 6M91S, 6M92, 6M192, 6M193, 6M194, 7J232, 7J259, 7M91D, 6J322, 6J357(5654) (5630), 7J323, 7J368 (5715), 7M916(5706), 5J217T(5524T), 6M91D(5631), 7J232T, 7J259T(5711T), 7M910(5706), 660, 666, 668(5616, 5626), 672, 680(5617), 7M91S, 8M195, 663.
Chassis Numbers—5510, 5520, 5524, 5610, 5615, 5631, 5632, 5637, 5642, 5711, 5803.
ZEPHYR RADIO CO.—(Also See Lincoln-Zephyr)—3M5, 3M7. 3M8.

NP43

BELMONT—566.
FIRESTONE—R143, 1431, 1781.7407-3, 7408-1.
GENERAL ELECTRIC—GA62.
STEWART-WARNER—R173, R1431,R1781, 1871(R187), R143, R160, R178, 1431, 1601 to 1609, 1781. 3211, 3212(321).

NP44

BOSCH—79, 79C, 139, 149, 337, 524A, 536B, 634, 634A, 735, 736, 736A2, 737, 737A2, 738, 738A2, 838, 858. 536, 636, 637, 139(Types V, VC, VT, VTC), 149(V, VC, VT, VTC), 169(V, VC, VT, VTC,) 524A (Additions 1, 2, 2D, 2G).
CORONADO—(Gamble-Skogmo)—500.
CROSLEY—A156, A157, A167 A177.
DELCO—500, 630, 631, 631A, 632, 633.
GENERAL MOTORS—985100, 985200.
GRUNOW—618. 614, 613.
HUDSON-TERRAPLANE—666, 668, 80985. 680.
PLA-RIGHT—500.
POWERTONE—500.
SKY-RANGER—500.
WESTINGHOUSE—WR500, WR501.
ZENITH—5M291, 6M292, 6M293, 6M294, 6M295, 666, 668, 680. 5M9D(5510), 5527, 5M294(5530), 5650, 6M390(Ford), 663, 664(5510), 5626, 5617.
Chassis Numbers—5616, 5645, 5805.

NP45

COLONIAL—593 [20159, R-15187].
DELCO—(UMS) R673, R675, R676, R677, R678.
GENERAL MOTORS—982127. [7237633]. 983679. 7238350. 982161. 1938 & 1939 (4-prong), 538, 539. 98526, 983527, 983044, 983844, 98252, 98253,
FC 98254, 98255 983834, 985200—(Second Series).
PC983834, 985200, (Second Series).
UNITED MOTORS—98252, 98253, 98254, 98255, 983526, 983527, 980244, 983834, 985200, (Second Series).

NP46

AIRCASTLE—1938 5-tube auto, Model 211.
CLIMAX—1938 5-tube auto.

NP46—continued

CORONADO—1938 5-tube auto.
GENERAL TELEVISION—1938 5-tube auto.
NORTHLAND—1938 5-tube auto.
PACIFIC—1938 Model 211.
WARWICK—1938 5-tube auto.

NP47

BELMONT—577, 577C, 661B, 676. DE-3000 [12610] [1267]
CANADIAN MARCONI—6B601, 68684, 577C (Belmont).
CORONADO—577, 577C, 661B, 676.
FRESHMAN—577, 577C, 661B, 676.
SKY ROVER—577, 577C, 661B, 676.
TRUETONE—577, 577C, 661B, 676.
WINGS—577, 577C, 661B, 676.

NP48

AIRLINE—62-750, 62-751, 93BR-564A.
ARVIN—9A, 19.
CONTINENTAL—6D, 7A, 55, 66, 660.
CROSLEY—A158, A168, A258, A256, A267, A268 A358, 587, 667, 5587. [G10-38000].
ELECTRONIC—25.
MALLORY—VP553, VP554.
MOTOROLA—Police, Police Cruiser.
NASH—AC3789.
PHILCO—38-35, 38-40.
PHILCO—(Transitone)—38-35(121), 38-40(121).
R.C.A. VICTOR—8M, 8M1, 8M2, 9M1, 9M2, 67M.
RADIO PRODUCTS—(Admiral)—6D, 7A.
SILVERTONE—6104.

NP49

FORD—(Including Marconi, Canada)—F1440, F1442, F1540, F1542.
KINGSTON—All 4-prong models.
PHILCO—(Transitone)—817, 817B, 817C, 817P, 818, 818K, 819, 819H, 826, 827, 827K, 828, 828K, 926, 927, 928K. C1450, C1452, F1540, F1442, G1418, G1436, L1420, L1424, L1425, L1427, L1429, L1460, N1518, N1433H, N1434H, N1514, P1417, P1430, P1432H, R1415, W1419, S1416, S1431, S1437, 1421P.
PHILCO—(Custom Built).
CHRYSLER & AIRFLOW—C9, C10, C11, C14, C15, C16, C17, C1540, C1542, C1550.C1450, C1423, C1452, C1608.
DE SOTO & AIRFLOW—S3.
DODGE—D5, D6, D7, C1452.
FORD—F1440, F1442, F1540, F1542.
GRAHAM—G1418, G1436. G1528.
HUPMOBILE—HT11X.
LINCOLN—Lincoln Zephyr—L1420, L1424, L1425, L1427, L1429. L1460, L1560, L1660.
NASH-LAFAYETTE—T7, T8, N1418, N1433, N1433H, N1434H. N1514, N1524.
PACKARD—P1417, P1421, P1422, P1426, P1430, P1432H, P1439, P1535. P1517, P1530, P1617, P1630, P1635.
PLYMOUTH—P3, P4.
REO—R1415.
STUDEBAKER—S1416, S1431, S1437. S1516, S1526, S1626.
WILLYS OVERLAND—W1419. 817, 817B, 817C, 817P, 818, 818K, 819, 819H, 826, 827, 827K, 828, 828K, 926, 927, 928K.

NP480

COLONIAL—495, 496, 536 [R-16034, 1015116034], 496X, 6101. 434, 439, 440, 441, 444.
CROSLEY—176, G6-38000.
DELCO—R640, R641, R642, R643, R644, R663, R664, R665, R666, R667, R668, R669. R673 (Police).
GENERAL MOTORS—985424, 985426, 983617, 984424, 983616, 982126, 7232553, 982153, 983534, 983569, 983570, 7233966, 7233967. 985252 to 985255, 985283 to 985285. 982084, 982085. 982043, 982044, 982045, 982083, 983526, 983527, 983534, 983569, 983570. 985537, 9.

NP480 —continued
[7233427, 5050673-Q, Y, Z].
SILVERTONE—(Sears Roebuck) 4600, 4601, 6100, 6101. 6000, 6001.
WESTINGHOUSE—WR500.

NP481
FORD—FT9, 816.
MOTOROLA—(Galvin)—57, 62, 75, 79, 100, 110.

NP482
AIRLINE—(Montgomery Ward)—6U, Z6S1, 199, 202, 62-118, 62-166.
AUTOCRAT—518, 618.
BLACKHAWK—6U, 64.
CADILLAC—6R, 6U2.
CORONADO—6U, 2SS1. 2651.
GENERAL ELECTRIC—C60, 6U.
GENERAL MOTORS—6S.
LAFAYETTE—(Wholesale Radio)—L30, 6S, 6U.
MOTOROLA—(Galvin)—Dual Six (D6), Twin Eight (T8).
R. C. A. VICTOR—M107.
STAR—6U.
TIGER—26S1.
TRUETONE—(Western Auto)—S740, 6S, 6U.
TRUVALUE—6U.
WELLS GARDNER—Z6R1, Z6S1, 6S, 6U, 26S1, 26U1 Z6U1.

NP483
FORD—FT9.
PHILCO—(Custom Built)—816, 816B, 816C, 816P.
CHRYSLER—CT2, CT5, CT10, CT11.
DE SOTO—CT5, CT10, CT11.
DODGE—DU.
FORD—FT9.
HUPMOBILE—HT11X.
LINCOLN—(Lincoln Zephyr)—LT14X3, LT14X4.
NASH-LAFAYETTE—T7, T8. NT12X, NT12X2, NT15, NT15X.
PACKARD—PHXD, PT14.
PHILCO—PT14X, T9, T10, T11, T12, T12X, T14, T14X, T15, T15Xm, HT11X, N-FND, CT10.
PIERCE-AIRO—MT14X4.
STUDEBAKER—ST12. ST15.

NP484
CHRYSLER—C1608.
GALVIN—48A5333.
MOTOROLA—15F, 16C, 18-D, 20P, 21L, 22S, 24K, 25N, 924, 944, 949, 17D, 19B, 969, 9-29, 9-39, 19B, 924A, 170. (Galvin)—34, 35, 45, 50, 60, 65, 70, 80, 90, 8-30, 8-40, 8-50, 8-60, 8-70, 8-80, "Companion," "Golden Voice."
PHILCO—(Transitone)—920, 921, 922. 933, 938K. (Ford)—F1640.

NP485
AIRMASTER—100XC, 100XT, 144XC, 144XT.
CORONADO—100XC, 100XT.
FORD—F1740.
GENERAL MOTORS—DELCO—7238303 [5061036-Y, 1239124].
MOTOROLA—(Galvin)—9-24.
MUSICAIRE—5C001, 5T001, 441XC, 441XT.
PHILCO (CUSTOM BUILT)—CHRYSLER—C1708.
SENTINEL—100XC, 100XT, 144XC, 144XT.
STUDEBAKER—S1726.

NP487
COLONIAL—591, 592 [41263-U, R, M] [1213732, 1213671].
GENERAL MOTORS—7238301 [7238829-Q, X, Y]. 982160. 983680.

NP489
AIRLINE—62-166.
BELMONT—6U.
MOTOROLA—Dual 6[D6], Twin 8[T8] [1062]
R.C.A. VICTOR—M107, [68690] [7780].
TRUETONE—6S, 6U, S740, P2080, P3110, 19A14, 19"16
WELLS-GARDNER—6S(2651), 6U(26U1). [P2110] [19A14] [19A16].

NP50
KARADIO—5P5, 807, 808, 809.
L'TATRO—CQ-69, DQ-69, NQ-69.
SETCHELL-CARLSON—PA6, 61, 62, 67, 77, 87, 221, 225, 610, 620, 621, 622, 630.
SETCO—(Setchell-Carlson)—44, 45, 60, 60S, 66, 66S, 68, 68S, 70, 70S, 71, 71S, 80, 605.

NP51
LAFAYETTE—(Wholesale Radio)—LW10.
PIERCE-AIRO—(DeWald)—(United Scientific)—640.

NP6
AIRLINE—(Montgomery Ward)—102.
ARVIN—(Noblitt Sparks)—15, 25(2nd), 35, 45(1st & 2nd).
ATWATER KENT—666, 776.
AUBURN—A5, A6.
BOSCH—78, 178.
CLARION—TC50.
COLONIAL—150 (Non Sync.), 164, 164B, 240.
EMERSON—KS38, 1A, 667, 965, 975.
FERGUSON—6-Prong.
FORD—(Including Marconi, Canada)—5601M—Lincoln, Utah Pack & Ford Zenith. [40-18839-A, B, C].
GILFILLAN—7A, 700, X, 8X.
INTERNATIONAL—(Kadette)—K6, K60.
KARADIO—35, 37, 68, 85, 150, 160, 180, 55 Police, 57B Sheriff, 757 Sheriff, 65, 66, 67S, 88.
LAFAYETTE—(Wholesale Radio)—L23. AM20, A60.
LINCOLN—Lincoln Zephyr—Utah Pack. SL1424-1937.
MAJESTIC—Utah Pack. [40-18839-A, B, C].
MATHESON BELL—6-34.
NORTHERN ELECTRIC—61.
NORTHLAND RADIO—(Kartone)—66A.
PACKARD BELL—25.
RADIART—(B Eliminator)—3311, 3312, 3314.
REMLER—35, 38.
SILVERTONE—7149—6 Prong.
SILVER MARSHALL—Hallicrafters—(6-Volt).
ST. REGIS—K6, K60.
TIFFANY TONE—535, 536, 537, 538, 557.
TROY—TR86, TR87.
TRUETONE—D740, 670.
UTAH RADIO PRODUCTS CO.—Majestic Pack.
WESTINGHOUSE—WR25, WR26, WR501, ZV3.
WILCOX-GAY—4B6, 4B6-2, 5F8-90, 5F8-790, 5F8-890, "Roadmate." A5, A6(5F8).
ZENITH—7, 7 Jr., 664 (Ford). [40-18839-A, B, C].

NP61
AUDIOLA—(Fairbanks Morse)—B6, 345, 346, 347.
SILVERTONE—18555 6 prong.

NP62
AIRCASTLE—611, 660.6.
DE LUXE—6-Prong (Non Sync.)—3400.
LAFAYETTE—(Wholesale Radio)—3400.
MOTOMASTER—De Luxe—65.
WARWICK—5-Tube Auto, 6-Tube Auto, 511, 618.

NP63
AIRLINE—(Montgomery Ward)—670.
BELMONT—580, 670, 670A, 680, 680A, 680B, 680C, 690, 880, 880A, 880B, 880C. 880D.
CORONADO—580, 670, 670A, 680, 880C. 580 [142-4]
GOODRICH—670.
GOODYEAR—(Wings)—580, 670.
HARLEY-DAVIDSON—670, "Highwayman."
HOWARD—HA1, "Highwayman," 670A.
IMPERIAL—6-Prong (Non Sync.).
KENNEDY—670.
SILVER-MARSHALL—HALLICRAFTERS.
TIGER—670, 670A. 270, 270A.
TRUETONE—(Western Auto)—D736, D739, D741, D742, 580, 670, 670A, 678A, 680, 749, 880.
WESTINGHOUSE—WR27.
WILCOX-GAY—3R6.

NP64
PHILCO—(Transitone)—821P, 821PV (Police), 819.

NP65
KARADIO—65, 66, 67, 67S, 75, 76, 77, 775, 88.

SL4H
COLONIAL—134.
MOTOROLA—(Galvin)—44, 55, 55A.

SL5
ACRATONE—640.
AIR CHIEF—66.
AIRMATE—(Buick, Olds. & Pontiac)—65.
ATWATER KENT—424, 534 (1st & 2nd), 816, 826.
AUBURN—(Also See Cord)—A5A2.
AUDIOLA—(Fairbanks Morse)—A6, 33A6, 33, 23S7 (5-Lead), 33S6 (5-Lead).
CANADIAN RADIO CORP.—513C, 513DOR.
CONSOLIDATED—51.
CROSLEY—A5A2, 5A1, 98, 99, 101, 102, 103, 119 (6-Volt), 167.
DE FOREST-CROSLEY—510A, 513A, 513B. 3D, 51, (Canada)—513C, 513D, 51, 510,513.
DELCO—(Olds., Buick, Pont. & Chev.)—4037, 4038.
EMERSON—F7, 34F7, 101F7, 640, 678 (1st & 2nd) 2KV-6.
FAIRBANKS-MORSE—33A6.
GENERAL MOTORS—980455, 980445.980441, 980459, 980555. 600249, 600565, 600566, 600749. 600153,(Canada)—134, 135.
INTERNATIONAL—(Kadette)—56.
KARADIO—56. 57, 57B.
ROGERS—(Canada)—918.
SPARTON—33 (Sync.), 33A (Sync.), 36.
UNITED MOTORS—(Delco)—4037, 4038.
WESTINGHOUSE—602.
WURLITZER—(All American Mohawk)—U50, U500.

SL51
GENERAL ELECTRIC—Armrest B40, B52, C41.
MARCONI—(Canada)—40, 42.
NORTHERN ELECTRIC—33, 40.
R. C. A. VICTOR—AR4229, DeLuxe, M34, M105, M116 (Arm Rest).
WESTINGHOUSE—A43, A44. WR33, WR41, WR42.

SL52
RADIART VIPOWER—4201.

SP5
AIRCASTLE—14-129.
ANDREA—610, 611, 612, 613(C6B), D6B. 616, 617, 618.
ARVIN—61B, 62B, 517, 517B, 518B, 527B, 617, 617B, 627B.
BOSCH—600, 818.
CLINTON—6V6.
DETROLA—14-129, 144, 145B, 145CR, 180, 184.144B, 144C.
EMERSON—73B, 77B, 96BE.
FADA—163(NK).126, 127, 128.
FERGUSON—F205.
FIRESTONE—7406-1, 7407-1.
GRUNOW—4NB, 410, 411, 711, (7NB).
KARADIO—667.
KNIGHT—B10600 to B10604, B10606 to B10611.
L'TATRO—CQ69, DQ69.
MIDWEST—7-36, 7-37, 7-38, 8-38, 12-38.
NORTHLAND RADIO—(Kartone)—41F, 48F.
PACIFIC—21, 22, 23. 80.
PATTERSON—78B, 79B, 80B, (Chassis 77B, 77BA), 168, 268.
PHONOLA—6V82E, 6V92D, 6V92P, 6V92S.
PILOT—G56, G57, 253 (2nd), 255(2nd).
RADOLEK—K16748, K16749.
SENTINEL—88BE, 119B, 130B, 130BE, 140B, 140BE.
SETCHELL-CARLSON—40, 41, 50, 51, 52, 410, 510.
SETCO—40, 41, 50, 51, 52, 410, 510.
SPARTON—637-6, 687-6. 638-6, 688-6.
SPIEGEL—2212 to 2215, 2254 to 2257, 2280, 2281-(14SE), 5218, 6712, 6716, 6766, 6772.
STEWART-WARNER—R191D (1911 to 1919), R192D (1921 to 1929).
STROMBERG-CARLSON—115.
TRUETONE—D719.

PRODUCTS COMPANY utah

SP5—continued

WARWICK—1935 & 1936 6-Volt Household.
WESTINGHOUSE—WR603, WR606, WR610.

SP5H

BOSCH—150-1.
ELECTRIC AUTO LIGHT—(Also See Wells Gardner)—O72A, 3722A.
FREED—A7, A9.
GENERAL MOTORS—06W, 072A. O6W. A6W(Std.), A6W(Master), O72(2nd), 2722(2nd).
LAFAYETTE—(Wholesale Radio)—L17762, S17762.
MALLORY—Eliminators Types 10 to 14.
MOTOROLA—77.
STROMBERG-CARLSON—33, 33A, 33X, 34.
TROPIC-AIRE—O6W.
TRUETONE—06W.
WELLS GARDNER—O6W(1st), O6W(2nd), O6X, O72, O72A, 172, 3722A.

SP50

BOSCH—45A, 45C, 140A, 45, 160, 140-2, 14-3, 150-2. 140-2, 140-3.
COLONIAL—150 Sync.).
CONSOLE—(L'Tatro)—6A.
GRAYBAR—150 (Chassis).
HARLEY-DAVIDSON—Police, YA.
L'TATRO—F, H465, 1455, 1465, J565, J665, K665, 5A. 1465.
MALLORY ELIMINATOR—Type 60.
MOTOROLA—44A, 66, 66A, 77A, 77A-B.
SENTINEL—(Erla)—4400.
SILVERTONE—(Sears Roebuck)—1859, 1859A, 7117.

SP51

AUBURN—980525, 980526.
COLONIAL—349, 355, 359, 361. 349F.
CORD—A245, A255, A455, 136, 137, 138, 540, 641.
CROSLEY—A366. A166, A255, A355, A455, A555.
DELCO—625, 626, 627, 628, 629, 634, 635, 405047.
GENERAL MOTORS—136, 137, 138, 540, 640, 641, 985400. 985301. 601176,601177,601525,601574, 601586, 601662, 601814, 985400, 1291344, 1291345, 393884, 544245, 544247, 544268, 405045, 544289, (Above 1,750,000), 544290, 544291, 393885, 544246, 544267, 544290, 544297, 544298, 405045, 405046, 405057, 405062. A245, A255, 985400, 601038, 980507, 980508, 980509 980525, 980526, 980529, 985300, 405063, 982006, 982007, 982008. 544246, 544267,544290, 544291, 544297, 544298, 983506, 983507.
GRAHAM—A355, A555, 39388, 889, 393885, 405045.
UNITED MOTORS—405047.

SP52

AUBURN—980525, 980526. [5041376]
DELCO—98500.
GENERAL MOTORS—980507,980508,980509,980525, 980526, 980529, 985300, 985301, 273D. [5041376] 504047, 544245, 544246, 601174, 601176, 601177, 601525, 601574, 601586, 601662, 601814. 1291344, 1291345.
GRUNOW—(General Household Utilities)—1936-34373, 625. 1936 Household.

SP53

DETROLA—1935 Sync.
MOTOROLA—44A, 66, 66A, 77A, 77AB, Super Six (S6).

SP54

GENERAL MOTORS—1304873 [7233419, 130483, 7232741-Q, Y]. 104873 [7232741-Q, Y]. 1304874, 1308221 (980598), 7232502.980620 [131423]. 980534, 980535, 980566, 980567, 1304873, All Buick, Olds., Pontiac & Chevrolet 1936, 1937 & 1938 of 980 Series.

SP55

ACRATONE—32C, 33C, 167B, 167D, 168B, 168D, K6, L7, X6, Z4. Z5.
ADMIRAL—BA41, L7, X6, X641, Z4, Z5, 950-6A, 965-6A, 965-6P. 512-6D, RPC.
AIRCASTLE—BA41, L7, X6, Z4, Z5, 330P.

SP55—continued

BALKEIT—GT156BA, L7, X6, Z4, Z5, 157BA.
CANALCADE—3511.
CAVALCADE—5311.
CLARION—31, 37, 453.
CONTINENTAL RADIO & TELEVISION CORP.—6PU 6P Admiral, X741. AZ593, L7, M551, M587, X6, X641, X741, Z4, Z5, Z544, 6P, 7J, 965-6P.
GOLDENTONE—L7, X6, Z4, Z5.
GOLD MEDAL—L7, X6, Z4, Z5.
HOWARD—6B, 6BA, 6BT, 7BT.
IMPERIAL—6-Volt Household.
KNIGHT—A9728, A9729, A9730, A9776, A9777, A9778, G9751, H9750, L7, X6, Z4, Z5, 25, 46. B10545, A10505(6P), B10546, B10547, B10548, B10549.
MAJASCO—V-6.
MONARCH—L7, X6, Z4, Z5.
PARMAC—6-Volt Household.
PILGRIM—DB, DF, DFE.
RADIO PRODUCTS—L7, X6, Z4, Z5.
RADOLEK—K16743, K16746.
RELIANCE—L7, X6, Z4, Z5. L16704, N16704.
REPUBLIC—56C, 56T, 76C, 76T.
SILVERTONE—7223.
SIMPLEX—DB, DBK, DF, DFK, FB, GB, GBE, PB, PBT XDB, 5DB, 1935-T.
SPIEGEL—L7, Z5, 144, 152, 167, 178, 182, 183, 4400, 4404, 4420, 4452 (6C-75).
STAR-LINE—4252.
SUPERTONE PRODUCTS INC.—L7, X6, Z4, Z5.
TRUETONE—(Western Auto)—L7, X6, Z4, Z5. D718, D708.
UNIVERSAL BATTERY CO.—6186, 7286.
WARWICK—453.
WEBSTER—Amplifier (6-Volt).
WESTERN AUTO SUPPLY—6P [P-402].
ZEPHYR RADIO CO.—DB, DF, GB, GBE, 20A6, 20B6, 20P6, 21A6, 21B6, 21P6, 22A6, 22B6, 22P6.

SP56

AIRMASTER—31B, 34B, 49B, 50B, 63BC, 63BT, 68BCE 68BTE. 63B, 73BA, 73B2, 96BCE, 96BTE, 119BC, 119BCT, 130BC, 130BT, 140BC, 140BT.
CORONADO—31BT, 34BT, 49B, 49BT, 50B, 50BT 63BC, 63BT, 68BCE, 68BTE. 73BA, 73BT, 96BCE, 96BTE.
DELCO—6010, 6011, R6012, R6015.
ERLA—(Sentinel)—66BE, 68B, 68BE, 66BCE, 66BCT, 66B, 68BT, 68BTE, 73BA, 73BT, 78B, 96BCE, 96BTE, 119BC, 140BT, 119BCT, 130BC, 130BT. 140BC.
FADA—6-Volt Household. NK(126, 127, 128).
KNIGHT—A9769, A9770, B10608. 68B, 68BE. A9768, A9833 to 9838, B10600, 66B, 66BE,
MIDWEST—7-37.
MUSICAIRE—5T37, 6CE69, 6TE69, 031CE,031T, 041BC, 041BT, 911C, 911T. 31B, 34B, 49B, 50B, 63BC, 63BT, 66BCE 66BTE, 68BC, 68BT.
RADOLEK—K16780.
R. C. A. VICTOR—BC6-6, BT6-5, RS66, RS166.
SENTINEL—31B, 31B72, 31B74, 34B, 34B71, 34B74, 34M73, 49B, 50B, 63B, 63BC, 63BT, 63BCE, 66BTE, 68BC, 68BCE.
SILVERTONE—1924, 1934.
STEWART-WARNER—1911, 1915(R1910), 1921, 1925 (R1920). 195.

SP57

DETROLA—128 [3421-A].

SP6

AUBURN—A5A3.
CROSLEY—A5A3, A155, 4A1. 6B1, 625, A155.
MARCONI—(Canada)—93, 94.

SP60

PHILCO—(Transitone)—624, 624B, 624H, 624R

SP61

GENERAL ELECTRIC—C61, 123 DeLuxe.
R. C. A. VICTOR—M123.

SP62

AIRLINE—62-258. 62-369.
BELMONT—678. 823 [126-3].
CORONADO—6J [19A30]. 6JA, 6JB.
DETROLA—1936 Sync.
GENERAL ELECTRIC—6K, M51, S725, S745, FA-60, FA-61, FA-80. N51.
GENERAL MOTORS—6C, 6J, 1425470, 1425471. 6KB.6J, 6KB.
TRUETONE—D745, S745, 6J, 6K. D978.
WARWICK—Sync. Models.
WELLS GARDNER—5X, 6J, 6K, 6KB, 46J3 C5, 6C7.
ZEPHYR—2M7, 20B6, 20P6, 21B6, 21P6, 22B6, 22P6.

SP63

EMERSON—DeLuxe 5A (Sync.).
GOLD MEDAL—TA.
MAJESCO—V-7.
SIMPLEX—TA(1st & 2nd), T-2.

SP64

R. C. A. VICTOR—R-283, 84BT6, 85BT6. RC283, RC316, 94BT6, 94BT61, 96BK6, 96BT6.

SP65

KINGSTON—6-Prong Sync.

SP66

AIRLINE—62-264, 62-280, 62-345, 62-373, 62-466, 62,463, 62-465, 62-650, 62-292, 62-294, 62-356, 62-373, 62-374, 62-446, 62-651, 62-651, 62-652. 19A28.
AIRCASTLE—3407. 202 [1506].
AIR PATROL—78(W832), 4B132(5406), 4B231(5409), 4B313(5410), 4B314, 4B317(5411), 4B355(5410), 4V59(5405),6B164(5635), 6B231(5653),6V62(5621), B2A, S2 Series 5H.
AMRAD—F546.
AUDIOLA—43C1B, 43T1B, 73C2B, 73T3B, 43, 67, 73, 6717, 6746. 73C3B.
AUTOTONE—6 tube.
BELMONT—408 Household, 415A, 415B, 804. X402, 415, 489, 504, 208 [126-4]. 489A, 504A, 611, 611A. 823A(EX), 408A, 62-552, 1268.
CLARION—562, 600, 650, 31, 37(453).
CLIMAX—AKE.
COLONIAL—R14840.
CORONA—212, 214.
CORONADA—489.
CROSLEY—846, 46, 416, 435, 546, 636, 6615.
DE LUXE—6-Prong Sync.
ECHOPHONE—6-Volt Household Models.
EMERSON—46V-11.
FADA—C6.
FAIRBANKS MORSE—4A, 4B, 6C, 43C1B, 73C3B, 73T3B, 432B. 6CC-2B, 6CT-4B, 43(43T1B), 67(6717, 6746).
FIRESTONE—87424.
GENERAL ELECTRIC—FB53, FB57, [2V-201], FB73, FB77 [K11J993). U51, U55.
GOODYEAR—(Wings)—1010219, 1015110, 1015111, 1015120, 105121.
HARLEY DAVIDSON—EG45A, M17815.
HOWARD—8742A-43, 6B, 6B8, 6BT, 7BT. 68B.
INTERNATIONAL—434 [G-131].
JACKOBS—Household.
KNIGHT—B10728, B10730, B10732, B10742, B10744, B10780.
LAFAYETTE—6-Prong Sync.
LION RADIO—612.
L'TATRO—EN6-4.
MOTOROLA—59H37825.56Y, 56T, 49BR2.
ORIOLE—600.
PARMAK—76.
PHILCO (CUSTOM BUILT)—NASH—AC4289. (Transitone)—37-34, 37-624, 38-39.
PILOT—253(3rd), 255(3rd).
PLA-PAL—185.
SILVER MARSHALL—6-Volt 6-Prong Household.
SILVERTONE—4418, 4419, 4421, 4430, 4434, 4441, 4451, 4459, 4519, 4521, 4559.

SP66—continued

1740(101476), 4405A(104127), 4433 6270. (104127), 4448A, 4453, 104127, 4528A, 4548A, 4640(101476), 4650(101476), 4740(101476), 4750 (101476), 7128A, 4613, 4622, 4623, 4643, 4722, 4723, 4743, 6005, 6070, 6071, 6072, 6076, 6077, 6170, 6171, 6172, 6176, 6210, 6214,
SPIEGEL—5200, 5210, 5214, 5216(651).
STEWART-WARNER—[89868], [110800].
TRAVLER—76, 173, 176, 525, 733. -600, 650, 179, 180, 679, 680.
TRUETONE—612.D706.
ULTRAMAR—345, 355.
UNIVERSAL BATTERY CO.—50A6.
WARWICK—562, 600, 651, 751, 453, 700, 761, 746, 846.
WELLS GARDNER—5H, 5K1, 65H.10652-714, 10652-768, Western.
ZENITH—4B106, 4B131, 4B132, 4B231, 4V31, 4V59, 6B107, 6B129, 6B164, 6V27, 6V59, 6V62. 5409, 4B313(5410), 4B314, 4B317(5411), 4B355(5410), 6B231(5653), 6B321(5653). Chassis Numbers—5404, 5405, 5406, 5621, 5635.

SP67

ADDISON—N655.
KNIGHT—(Allied Radio)—G9875, G9876, H9817, H9876, 6820, 6826. 6280.
LAFAYETTE—(Wholesale Radio)—J60, M44, 9682.
LEWOL—9682.
PACIFIC—682, 9682.

SP68

ADDISON—N655.
KNIGHT—G9875, G9876, H9817, H9876, 6820, 6826.
LAFAYETTE—J60, M44, 25, 480, 9682.
L'TATRO—L4616, M4616, N4616, O4626, O5636, P4626, Q4626, Q5636, R5236, R5636, S5636, S6636.
LEWOL—9682.
PACIFIC—682, 9682.
PILOT—A53 (1st.), 255 (1st.).
STEWART-WARNER—1891(R189).

SP69

AIRLINE—(Montgomery Ward)—5Y, 5Y1, 15Y1, 54, 62-199.
CADILLAC—62-118, 62-119.
CORONADO—5Y, P2229.
GENERAL ELECTRIC—D50, D51, D52.
LAFAYETTE—(Wholesale Radio)—B52, B62.
R. C. A. VICTOR—EG37A1, M101, M104, M108, RC166. 1B23914.
SPARTON—9930.
SPIEGEL—9930(25Y).
TRUETONE—(Western Auto)—D735, S735, 5Y, 25Y1.
WELLS GARDNER—5Y, 25Y1.

SP633

AIRLINE—62-290, 62-282, 62-284 (Series B).
GENERAL MOTORS—143397(0(8C8).

SP640

AIRLINE—62-364.
BELMONT—[1269].
CORONADO—6C7.
DETROLA—297 [6735].
WELLS-GARDNER—6C7, 6C9, 38C7, 36C11.

SP641

WELLS-GARDNER—5C10, SP642.

SP645

AIRLINE—62-334.
CHRYSLER—25C6.
CORONADO—C6, 5C5, 15C6.
TRUETONE—D748.
WELLS-GARDNER—C6A, C6B, 5C6, 15C6, C6, C7.

SP690

CORONADO—6C9 [19A33].

SP7

AIRLINE—(Montgomery Ward)—7Q, 7S, 62-327, 62-337, 62-427, 62-437. 62-331, 62-441, 1631D to 1639D (R163, R163D), 1641D to 1649D (R164, R164D)
ARCADIA—(Wells Gardner)—7Q, 7S.
GENERAL ELECTRIC—U70, U75.

2SP7—continued

STEWART WARNER—R163, R163D, R164, R164D, 1631D to 1639D, 1641D to 1649D.
WELLS GARDNER—7Q, 7S. 7P.

SP71

BOSCH—189HB (Police), 189HR (Police).
BENDIX—RP2A (Police).
CORONADO—6M2.
FIRESTONE—R1322.
GENERAL MOTORS—983667.[1213446].
HOWARD—HA6.
HUDSON-TERRAPLANE—CB6, DB37.DB38, SA37, SA38
MALLORY—B Eliminators—VP551, VP552, 6-Volt.
NASH-LAFAYETTE—AC3689.
R. C. A. VICTOR—5M, 6M, 6M2, 8M4, 67M1, 67M2, 67M3.6B6, DB37, M122754, 8M3.
RADIART VIPOWER—4203.
SILVERTONE—(Sears Roebuck)—HA6, 4400, 107HA62 4400A.
TERRAPLANE—DB-37.
TRIANGLE—6P.

SP72

FIRESTONE—DeLuxe, R132, 1322.
RADIART VIPOWER—4204.
STEWART WARNER—R132, 1332.

32NL3*

(32-Volt Household)

AUDIOLA—SD8234, 33S8(2nd), 816.
AUTOCRAT—(Herbert H. Horn)—6D32.
CORONADO—(Gamble-Skogmo)—2605, 6101.
ELECTRONIC—332.
FORDSON—FP-32-Volt (Above 35001).
KNIGHT—(Allied Radio)—F9777, G9615.
LAFAYETTE—(Wholesale Radio)—AM20.
RADOLEK—10968.
SENTINEL—(Erla)—6100, 6101, 6102.
SIMPLEX—P32, 1933-PF, 1934-PF.
WILSON—32-Volt Household.

32LN3M*

MAJESTIC—Replacement Heads For—490, 491, 493. (32-Volt Household).

12NP482*

R. C. A. VICTOR—12-Volt M107, All other 12-Volt 4-Prong Models.

32NP42*

(32-Volt Household)

AIRLINE—(Montgomery Ward)—6B, 62-136, 62-138.
AUDIOLA—62-136, 62-138.
CORONADO—(Gamble-Skogmo)—26B5.
GOVERNOR—(L'Tatro)—N74.
LAFAYETTE—(Wholesale Radio)—B64.
LIEUTENANT GOVERNOR—(L'Tatro)—L74.
L'TATRO—A255, A525, B525, C625, C925, D625, D925, F725, F925, IN25, L74, N74, O94, P54, P64, T6216, U5226, V5226, W6236, X6236, Y6236.
MOTOROLA—(Galvin)—Railroad Receiver.
PRESIDENT—(L'Tatro)—O94.
RECORDER—P54, P64.
SILVERTONE—1855 (4-Prong).
UTAH RADIO PRODUCTS—32-Volt B Eliminator.
WELLS GARDNER—6B, 26B1 to 26B5, 26R1, 36D510 36D560.
ZENITH—[190-12].

32NP48*

GALVIN—12-R.

32NP61*

(32-Volt Household)

AIRLINE—32-Volt Non Sync.
ASSOCIATED RADIO—32-Volt (Plug-in).
ATWATER KENT—565FF, 135Z, 215Z, 265Z, 305Z 565Z, 132, 138.
COLONIAL—1934 32-Volt Models.
MAJESTIC—Plug-in Vibrators For—490, 491, 493.
RADIART—3316.
SILVERTONE—1855 (6-Prong).

32SL5*

(32-Volt Household)

CROSLEY—119(32-Volt), 159(32-Volt).
DELCO—4049, 4050, 4051.
UNITED MOTORS—4049, 4050, 4051.

4SP5*

FADA—4-Volt 124, 4-Volt 1246.
GAROD—2B6, 2B6-1, 3B6, 3B6-3, 4-Volt.

4SP56*

CORONADO—6BK, 6BT, 10V.
GAROD—2B6, 2B6-1, 3B6, 3B6-3.
R. C. A. VICTOR—CV8, 6BK, 6BT, 8BK, 8BT, 6BK6 6BT6, 8BK6, 8BT6.

4SP65*

EMERSON—P117, P135.

4SP66*

CROSLEY—117 Power Pack, 557.
FADA—1246, 246.
GENERAL ELECTRIC—FB52, FB56, FB72, FB76. FB-53, FB-57, FB-73, FB-77.
ZENITH—5407. 5F134, 5F166, 4F133—Chassis Number—5518.

12SP69*

CORONADO—(Gamble-Skogmo)—12-Volt—5Y.
R. C. A. VICTOR—M101, M104, M109—12-Volt
WELLS GARDNER—12-Volt—5Y.

12SP71*

MALLORY—B Eliminator—VP-G556. 12-Volt.

32SP5*

AIRLINE—(Montgomery Ward)—Sync. (5-Prong 32-Volt) (Household).

32SP6*

(32-Volt Household)

CROSLEY—645, 4049.
DELCO—3203, 3204.
UNITED MOTORS—3203, 3204.

32SP5H*

(32-Volt Household)

GOVERNOR—(L'Tatro)—N54.
LIEUTENANT GOVERNOR—(L'Tatro)—L54.
L'TATRO—L54, N54, O84.
PRESIDENT—(L'Tatro)—O84.
TIFFANY TONE—535, 536, 537, 538, 557.

***These are Special Vibrators—See Notes "A" and "B."**

NOTE "A"

All 12, 32-volt vibrators listed above can be obtained on special order. Any other Utah Vibrator listed above can be obtained in 4, 12, 24 or 32-volt at an additional list of 50c over that of 6-volt.

The numerals preceding the type designating letters such as (4NP6) indicates that the vibrator is a 4-volt NP6 for 4-volt Receivers.

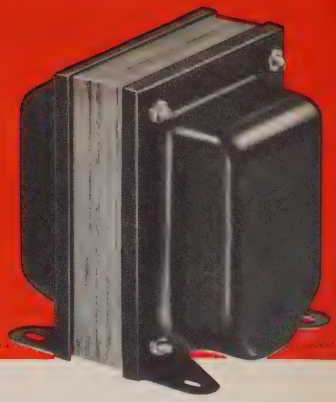
NOTE "B"

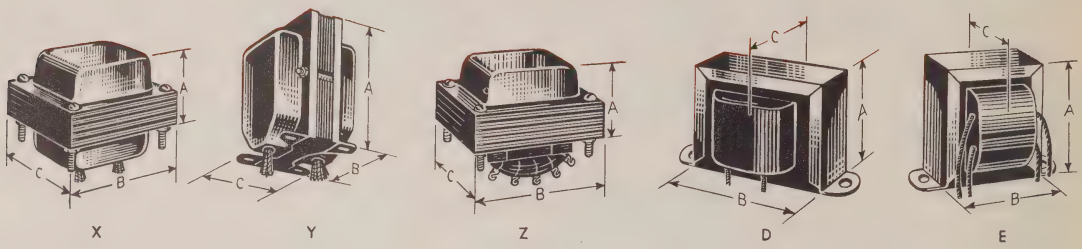
If vibrator wanted is not listed, send defective vibrator unit to us, giving the name and the model radio from which it was taken and we will send proper replacement. Be sure to send prepaid with your name and address plus the above information.

UTAH VIBRATORS ARE GUARANTEED 12 MONTHS AGAINST DEFECTIVE WORKMANSHIP OR MATERIAL.

utah TRANSFORMERS

REPLACEMENT FOR SERVICE AND SET BUILDERS





A complete line of replacement transformers designed to service the requirements of practically any radio set on the market. Utah Transformers are standard equipment in millions of receivers throughout the world—definite proof of their reliability and performance under all operating conditions—your assurance of permanently satisfied customers.

Fully impregnated and climate-proof.

First letter in part No. designates mounting style; next number principal filament voltage; next two numbers, total mills output. A letter at end designates additional filaments — E is 3 filaments, G is 5 filaments. No letter means 2 filaments.

2½ VOLT TUBE POWER TRANSFORMERS — 2 FILAMENTS

Style	Stock Number	A.C. Plate Volts	Filament No. 1	Filament No. 2	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
X	X 240	650 Volts C.T. 40 Mills.	5 Volts 2 Amps.	2.5 V.C.T. 4 Amps.	1½x3x2½	2½x2	2 Lbs.	$2.00
Y	Y 240	" " " " "	" " "	" " " "	3⅛x2½x2⅜	2x1½	"	2.25
Z	Z 240	" " " " "	" " "	" " " "	1½x3x2½	2½x2	"	1.85
X	X-245	" " " " "	" " "	2.5 V.C.T. 7 Amps.	1¾x3 x3½	"	2½ Lbs.	$2.90
Y	Y-245	" " " " "	" " "	" " " "	3⅛x2½x2⅝	2x1¾	2¾ "	3.00
Z	Z-245	" " " " "	" " "	" " " "	1¾x3 x2½	2½x2	2¼ "	2.75
X	X 250	700 Volts C.T. 50 Mills.	" " "	2.5 V.C.T. 5 Amps.	1¾x3x2½	"	2½ Lbs.	2.40
Y	Y 250	" " " " "	" " "	" " " "	3⅛x2½x2⅝	2x1¾	2¾ "	2.75
Z	Z 250	" " " " "	" " "	" " " "	1¾x3x2½	2½x2	2¼ "	2.25

2½ VOLT TUBE POWER TRANSFORMERS — 3 FILAMENTS — (continued)

Style	Stock Number	A.C. Plate Volts	Filament No. 1	Filament No. 2	Filament No. 3	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
X	X 250E	650 Volt C.T. 50 Mills.	5 Volts 3 Amps.	2.5 V.C.T. 1¾ Amps.	2.5 V.C.T. 5¾ Amps.	2x3x2½	2½x2	3 Lbs.	$2.90
Y	Y 250E	"	"	"	"	3⅛x2½x2⅞	2x2	3¼ "	3.15
Z	Z 250E	"	"	"	"	2x3x2½	2½x2	2¾ "	2.75
X	X 260E	700 Volt C.T. 60 Mills.	5 Volts 2 Amps.	2.5 V.C.T. 1¾ Amps.	2.5 V.C.T. 7 Amps.	2x3x2½	2½x2	3 Lbs.	3.25
Y	Y 260E	"	"	"	"	3⅛x2½x2⅞	2x2	3¼ "	3.50
X	X 270E	700 Volt C.T. 70 Mills.	5 Volts 3 Amps.	2.5 V.C.T. 3 Amps.	2.5 V.C.T. 7 Amps.	2x3⅜x2 13/16	2 13/16x2¼	3¾ Lbs.	3.35
Y	Y 270E	"	"	"	"	3½x2⅞x3⅛	2¼x2	4 "	3.75
Z	Z 270E	"	"	"	"	2x3⅜x2 13/16	2 13/16x2¼	3½ "	3.20
X	X 290E	700 Volt C.T. 90 Mills.	5 Volts 3 Amps.	2.5 V.C.T. 3 Amps.	2.5 V.C.T. 10½ Amps.	1⅞x3¾x3⅛	3⅛x2½	4 Lbs.	3.75
Y	Y 290E	"	"	"	"	3⅞x3¼x3⅛	2½x1 15/16	4¼ "	4.00
Z	Z 290E	"	"	"	"	1⅞x3¾x3⅛	3½x2½	3¾ "	3.60
X	X 211E	700 Volt C.T. 110 Mills.	5 Volts 3 Amps.	2.5 V.C.T. 3 Amps.	2.5 V.C.T. 15¼ Amps.	2⅛x3¾x3⅛	3⅛x2½	4¾ Lbs.	4.90
Y	Y 211E	"	"	"	"	3⅞x3¼x3⅜	2½x2 3/16	5 "	5.25
Z	Z 211E	"	"	"	"	2⅛x3¾x3⅛	3⅛x2½	4½ "	4.75
X	X 212E	800 Volt C.T. 125 Mills.	5 Volt C.T. 3 Amps.	2½ Volt C.T. 3½ Amps.	2½ Volt C.T. 15 Amps.	2⅜x4⅛x3 1/16	2¾x3 7/16	5¾ Lbs.	5.50
Y	Y 212E	"	"	"	"	4¼x3½x3¾	2¾x2 11/16	6 "	5.75
Y	Y 216E	850 Volt C.T. 160 Mills.	5 Volts 3 Amps.	2.5 V.C.T. 8 Amps.	2.5 V.C.T. 14 Amps.	4⅝x3¾x3¾	3x2¾	7¼ Lbs.	5.95
Z	Z 216E	"	"	"	"	2 7/16x4½x3¾	3¾x3	6¾ "	5.50
Y	Y 220E	850 Volt C.T. 200 Mills.	5 Volts 3 Amps.	2.5 V.C.T. 8 Amps.	2.5 V.C.T. 14 Amps.	4⅝x3¾x4⅛	3x3⅛	8¾ Lbs.	8.15

6.3 VOLT TUBE POWER TRANSFORMERS — 2 FILAMENTS

Style	Stock Number	A.C. Plate Volts	Filament No. 1	Filament No. 2	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
X	X 640	650 Volts C.T. 40 Mills.	5 Volts 2 Amps.	6.3 V.C.T. 1.6 Amps.	1½x3x2½	2½x2	2 Lbs.	$2.00
Y	Y 640	" " " " "	" " "	" " " "	3⅛x2½x2⅜	2x1½	2¼ "	2.25
Z	Z 640	" " " " "	" " "	" " " "	1½x3x2½	2½x2	2 "	1.80
X	X 650	700 Volts C.T. 50 Mills.	5 Volts 2 Amps.	6.3 V.C.T. 2 Amps.	1¾x3x2½	2½x2	2½ "	2.70
Y	Y 650	" " " " "	" " "	" " " "	3⅛x2½x2⅝	2x1¾	2¾ "	2.95
Z	Z 650	" " " " "	" " "	" " " "	1¾x3x2½	2½x2	2¼ "	2.65
X	X 660	700 Volts C.T. 60 Mills.	5 Volts 2 Amps.	6.3 V.C.T. 2.5 Amps.	2x3x2½	2½x2	3 "	3.00
Y	Y 660	" " " " "	" " "	" " " "	3⅛x2½x2⅞	2x2	3¼ "	3.45
Z	Z 660	" " " " "	" " "	" " " "	2x3x2½	2½x2	2¾ "	2.85
X	X 675	700 Volts C.T. 75 Mills.	5 Volts 3 Amps.	6.3 V.C.T. 3.2 Amps.	2x3⅜x2 13/16	2 13/16x2¼	3½ "	3.30
Y	Y 675	" " " " "	" " "	" " " "	3½x2⅞x3⅛	2¼x2	3¾ "	3.65
Z	Z 675	" " " " "	" " "	" " " "	2x3⅜x2 13/16	2 13/16x2¼	3½ "	3.15
X	X 690	700 Volt C.T. 90 Mills.	5 V.C.T. 3 Amps.	6.3 V.C.T. 3.5 Amps.	2⅛x3¾x3⅛	3⅛x2½	4⅜ Lbs.	3.75
Y	Y 690	" " " "	" " " "	" " " "	3⅞x3¼x3⅜	2½x2 3/16	5 "	4.10
Z	Z 690	" " " "	" " " "	" " " "	2⅛x3¾x3⅜	3⅛x2½	4½ "	3.60
X	X 612	750 Volts C.T. 125 Mills.	5 Volts 3 Amps.	6.3 V.C.T. 5 Amps.	2⅛x3¾x3⅛	3⅛x2½	5 "	3.90
Y	Y 612	" " " " "	" " "	" " " "	3⅞x3¼x3⅜	2½x2 3/16	5¼ "	4.35
Z	Z 612	" " " " "	" " "	" " " "	2⅛x3¾x3⅛	3⅛x2½	4¾ "	3.75
Y	Y 616	800 Volts C.T. 160 Mills.	5 Volts 3 Amps.	6.3 V.C.T. 6 Amps.	4¼x3½x3¾	2¾x2 11/16	6 "	5.75

6.3 VOLT FILAMENT POWER TRANSFORMERS—3 FILAMENTS

Style	Stock Number	A.C. Plate Volts	Filament No. 1	Filament No. 2	Filament No. 3	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
X	X 620E	800 Volts C.T. 200 Mills.	5 Volts 3 Amps.	6.3 V.C.T. 3 Amps.	6.3 V.C.T. 6 Amps.	2¼x4½x3¾	3¾x3	6½ Lbs.	$6.65
Y	Y 620E	"	"	"	"	4⅝x3¾x3½	3x2½	6¾ "	7.00
Z	Z 620E	"	"	"	"	2¼x4½x3¾	3¾x3	6 "	6.50

COMBINATION 6.3 and 2.5 VOLT FILAMENT POWER TRANSFORMERS

Style	Stock Number	A.C. Plate Volts	Filament No. 1	Filament No. 2	Filament No. 3	Filament No. 4	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
X	X62-70E	700 Volts C.T. 70 Mills.	5 Volts 2 Amps.	2.5 V.C.T. 4 Amps.	6.3 V.C.T. 3 Amps.	——	2x3⅜x2 13/16	2 13/16x2¼	3½ Lbs.	$3.50
Y	Y62-70E	"	"	"	"	——	3½x2⅞x3⅛	2¼x2	3¾ "	3.75
Z	Z62-70E	"	"	"	"	——	2x3⅜x2 13/16	2 13/16x2¼	3½ "	3.35
Y	Y62-25F	870 Volts C.T. 250 Mills. Bias Tap 80 V.	5 Volts 3 Amps.	2.5 V. 3 Amps.	2.5 V.C.T. 10.5 Amps.	6.3 V.C.T. 1.5 Amps.	4⅝x3¾x3⅝	3x2⅝	6¾ Lbs.	10.00

6.3 VOLT POWER TRANSFORMERS WITH MOTOR TUNING WINDING

Style	Stock Number	A.C. Plate Volts	Filament No. 1	Filament No. 2	Motor Winding	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
X	X 2511	700 Volts C.T. 120 Mills.	5 Volts C.T. 5 Amp.	6.3 Volts C.T. 5 Amp.	50 Volts Tapped 18 V. and 24 V.—35 Watts	2½x4½x3¾	3x3¾	7 Lbs.	$5.50
Y	Y 2515	"	"	"	"	4⅝x3¾x3¾	3x2¾	7¼ "	5.75
X	X 2510	750 Volts C.T. 150 Mills.	5 Volts C.T. 5 Amp.	6.3 Volts C.T. 5.2 Amp.	50 Volts Tapped 18 V. and 24 V.—35 Watts	2½x4½x3¾	3x3¾	7 Lbs.	6.25
Y	Y 2514	"	"	"	"	4⅝x3¾x3¾	3x2¾	7¼ "	6.50
X	X 2509	800 Volts C.T. 200 Mills.	5 Volts C.T. 3 Amp.	6.3 Volts C.T. 5.3 Amp.	50 Volts Tapped 18 V. and 24 V.—35 Watts	2⅝x4½x3¾	3x3¾	7¾ "	8.00
Y	Y 2516	"	"	"	"	4⅝x3¾x3⅞	3x2⅞	8 "	8.25

FILAMENT TRANSFORMERS

Style	Stock Number	Filament	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D	2467	2.5 Volts C.T. 5 Amps.	2¼x2 11/16x1⅞	3⅛	1½ Lbs.	$1.25
D *	2468	5 Volts C.T. 4 Amps.	2⅝x3x1⅞	2⅜x1 7/16	2 "	1.65
D *	2466	6.3 Volts C.T. 5 Amps.	2⅝x3x2	2⅜x1 9/16	2⅛ "	1.75
D	2471	6.3 Volts Tapped 2.5 V. and 5 V. All at 2.5 Amps.	2¼x2½x1⅞	3⅛	1½ "	1.95

*Similar to Style D—Horizontal Mounting Angle Frame

6 VOLT VIBRATOR TRANSFORMERS

Style	Stock Number	D.C. Volts To Filter	M.A.	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D *	2482	150	35	2¼x2 11/16x1 15/16	3⅛	1¾ Lbs.	$2.15
D *	2459	225	40	2¼x2 11/16x1 15/16	3⅛	1¾ "	2.25
Y	2460	250	50	3⅛x2½x2⅝	2x1¾	2¾ "	2.75
Y	2461	275	75	3⅛x2½x2⅝	2x1¾	2¾ "	3.25

*Same as style D except fully encased

MICROPHONE, LINE TO GRID AND PICKUP TRANSFORMERS

Style	Stock No.	Description	Core Size (Inches)	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D	8865	S. B. Microphone to Single Grid—200 or 70 Ohms at 25 Ma.	½x½	1⅜x1 11/16x1⅛	2	6 Oz.	$1.00
D	8864	S. B. Microphone to Single Grid—100 Ohms to 60,000 Ohms	½x⅝	1⅜x1 11/16x1¼	2	7 Oz.	1.20
E	8863	D. B. Microphone to Single Grid—200 Ohms to 57,000 Ohms	⅝x⅝	1⅞x1⅝x1⅜	2	¾ Lb.	1.75
Y	8862	D. B. Microphone to Single Grid—200 Ohms to 100,000 Ohms	¾x¾	2⅜x2 x2	1 9/16x1⅜	1¼ Lbs.	2.75
Y	8861	D. B. Microphone or Low Imped. Pickup to Single Grid—200 & 500 Ohms C.T. to 150,000 Ohms	1 x 1	3⅛x2½x2⅝	2 x1¾	2¾ Lbs.	4.00
Y	8860	Low Imped. Pickup or Dynamic Microphone to Sgle. Grid—4, 8, 15 & 30 Ohms to 200,000 Ohms	¾x1	2⅜x2 x2¼	1 9/16x1⅜	1½ Lbs.	2.75
Y	8859	D. B. Microphone and 200 Ohm Line to P. P. Grids 200 Ohm C.T. to 100,000 Ohms	¾x¾	2⅜x2 x2	1 9/16x1⅜	1¼ Lbs.	2.00

FILTER CHOKES

Style	Stock Number	Mills.	Henries	D.C. Res.	Core Size (In.)	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D	4831	40	5	150	½x½	1⅜x1 11/16x1 3/16	2	7 Oz.	$ .60
D	4660	30-40	7	200	½x9/16	1⅜x1 11/16x1¼	"	"	.60
D	4818	"	8	300	"	" " "	"	"	.70
D	4661	"	10	400	"	" " "	"	"	.60
D	4815	"	12	500	"	" " "	"	"	.70
D	4662	"	10	200	⅝x⅝	1⅝x1 15/16x1⅜	2⅜	10 Oz.	.85
D	4663	"	15	400	"	" " "	"	"	.85
D	4664	"	18	500	"	" " "	"	"	.85
D	4665	75	15	200	¾x¾	1⅞x2 5/16x1⅝	2 13/16	1 Lb.	1.40
D	4001	50	23	400	"	" " "	"	"	1.40
D	4027	50	30	550	"	" " "	"	"	1.40
D	4816	40	40	800	"	" " "	"	"	1.40
D	4666	100	15	160	⅞x⅞	2¼x2 11/16x1⅞	3⅛	1¾ Lbs.	1.65
D *	4002	75	30	340	"	" " "	"	"	1.65
D	4667	175	10	100	1x1	2½x3 1/16x2⅛	3 9/16	2½ Lbs.	2.10
D *	4003	110	30	235	"	" " "	"	"	2.10
E °	4668	200	10	120	1⅛x1⅛	3⅜x2 13/16x2½	2¼x2⅛	3¼ Lbs.	3.25
E °	4008	250	12	125	1¼x1¼	3¾x3¼x2¾	2½x2¼	4½ "	4.00
E °	4669	300	10	80	1½x1½	4½x3¾x3½	3x2½	7½ "	5.25

*—Lug Terminals °—Vertical Angle Bracket Mounting and Lug Terminals

AUDIO REACTORS

Style	Stock No.	Mills.	Henries	D. C. Resistance	Core Size (Inches)	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D*	4831	10	150	3,500	¾x¾	1⅞x2 5/16x1⅝	2 13/16	1 Lb.	$2.00
D	4824	10	300	6,000	¾x¾	1⅞x2 5/16x1⅝	2 3/16	1 Lb.	1.85
Y	4825	10	1000	10,000	1 x 1	3⅜x2½x2⅝	2x1¾	2¾ Lbs.	4.50

*Center Tapped.

INPUT AUDIO TRANSFORMERS — SINGLE PLATE TO SINGLE GRID

Style	Stock Number	Ratio	Core Size (In.)	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D	8300	3 - 1	½x9/16	1⅜x1 11/16x1¼	2	7 Oz.	$1.10
D	8304	"	⅝x⅝	1⅝x1 15/16x1⅜	2⅜	10 "	1.15
D	8310	"	¾x¾	1⅞x2 5/16x1⅝	2 13/16	1 Lb.	1.75
D	8316	4 - 1	⅞x⅞	2¼x2 11/16x1⅞	3⅛	1½ Lbs.	2.25

INPUT AUDIO TRANSFORMERS — SINGLE PLATE TO PUSH PULL GRIDS

Style	Stock Number	Ratio	Core Size (In.)	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D	**8301**	3 - 1	½x9/16	1⅜x1 11/16x1¼	2	7 Oz.	$1.15
D	**8305**	"	⅝x⅝	1⅝x1 15/16x1⅜	2⅜	10 "	1.35
D	**8311**	"	¾x¾	1⅞x2 5/16x1⅝	2 13/16	1 Lb.	1.75
D	**8319**	"	1x1	2½x3 1/16x2⅛	3 9/16	2¼ Lbs.	2.50

SPECIAL AUDIO AND DRIVER INPUT TRANSFORMERS — SINGLE AND PUSH PULL

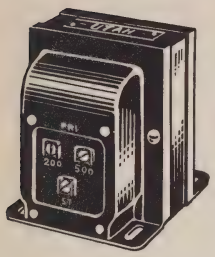
Style	Stock Number	Description: Driver Tube	Description: Output Tube	Core Size In.	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U.S.A. List Price
D	**8748**	1-30	1-19, 1-1J6G, 2-30	½x9/16	1⅜x1 11/16x1¼	2	7 Oz.	$1.25
D	**8329**	"	" " "	¾x¾	1⅞x2 5/16x1⅝	2 13/16	1 Lb.	1.60
D	**8323**	1-56, 76, 6C5	2-2A3, 2-6A3	"	" " "	"	"	2.50
D	**8328**	" " "	2-45	⅞x⅞	2¼x2 11/16x1⅞	3⅛	1½ Lbs.	3.00
D	**8324**	2-56, 76, 6C5	2-2A3, 2-6A3	"	" " "	"	"	3.00
D	**8326**	1-2A5, 42, 6F6 Triode	2-2A5, 2-42 Fixed Bias	"	" " "	"	"	3.00
D	**8327**	" " " "	2-2A5, 2-42 Self Bias	"	" " "	"	"	3.00
D	**8325**	1-45, 2A5, 42	PAR or PP 2A3	1x1	2½x3 1/16x2⅛	3 9/16	2¼ Lbs.	3.50
D	**8321**	Single Plate 35 Mills.	Push Pull Class "A"	¾x¾	1⅞x2 5/16x1⅝	2 13/16	1 Lb.	2.50
D	**8322**	Push Pull Plates 35 Mills.	" "	⅞x⅞	2¼x2 11/16x1⅞	3⅛	1½ Lbs.	3.00

UNIVERSAL OUTPUT TRANSFORMERS

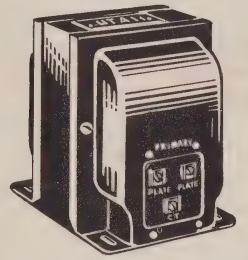
Style	Stock Number	Description: Primary	Description: Secondary	Nominal Wattage	Core Size (In.)	Dimensions (In.) A B C	Mounting Centers (In.)	Shipping Weight	U S.A. List Price
D	**8775**	Universal—any tube combination	Any voice coil	4	½x⅝	1⅜x1 11/16x1¼	2	7 Oz.	$1.25
D	**7364**	" "	" " "	8	⅝x⅝	1⅝x1 15/16x1⅜	2⅜	¾ Lb.	1.55
E	**5999***	" "	" " "	12	¾x¾	2 5/16x1 15/16x1½	"	1¼ Lbs.	1.65
D	**7390**	" "	" " "	18	⅞x⅞	2¼x2 11/16x1⅞	3⅛	1¾ "	1.95
E	**8777**	Universal—any tube combination or 500 Ohm line	" " "	12	¾x¾	2 5/16x1 15/16x1½	2⅜	1¼ "	1.90
D	**8776**	" "	" " "	18	⅞x⅞	2¼x2 11/16x1⅞	3⅛	1¾ "	2.25
E	**8332**	Heavy Duty Push-Pull	4-6-8-10-16 Ohms	26	1x1	3 1/16x2½x2	"	2¼ "	3.00
E	**8331**	" "	250-500 Ohms	"	"	" " "	"	" "	3.00
D	**8779**	" "	500-1000-1500-2000 Ohms	"	"	2½x3 1/16x2⅛	3 9/16	" "	3.00
E	**8335**	Heavy Duty Push-Pull Class "B"	250-500 Ohms	"	"	3 1/16x2½x2	3⅛	" "	3.00
D	**8755**	Universal Line 500-1000-1500-2000 Ohms	5 Ohms	4	½x9/16	1⅜x1 11/16x1¼	2	7 Oz.	.85
D	**8747**	" "	6 "	8	⅝x⅝	1⅝x1 15/16x1⅜	2⅜	¾ Lb.	.85
D	**8746**	" "	8 "	"	"	" " "	"	" "	.85
E	**8749**	" "	6-8 "	12	¾x¾	2 5/16x1 15/16x1½	"	1¼ Lbs.	1.50
D	**8750**	" "	8 "	18	⅞x⅞	2¼x2 11/16x1⅞	3⅛	1¾ "	1.95
E	**8752**	" "	8 "	"	"	2 11/16x2¼x1⅞	2 13/16	" "	1.95
E	**8753**	" "	8 "	26	1x1	3 1/16x2½x2	3⅛	2¼ "	2.25
D	**8871**	Universal Line	Any voice coil	8	⅝x⅝	1⅝x1 15/16x1⅜	2⅜	¾ "	1.75
E	**8513**	" "	" " "	12	¾x¾	2 5/16x1 15/16x1½	2⅜	1¼ "	1.95
E	**8514**	" "	" " "	18	⅞x⅞	2 11/16x2¼x1⅞	2 13/16	1¾ "	2.35

*Number 5999 Available also for Horizontal Mounting—U. S. A. List Price $1.65.

TRANSFORMERS
FOR
AMATEUR TRANSMITTERS AND PUBLIC ADDRESS EQUIPMENT



Style B
Overall size
3⅝" H x 2⅝" L x 3"
to 3½" W



Style C
Overall size
4½" H x 3½" L x
3⅛" to 3⅜" W

PLATE SUPPLY TRANSFORMERS

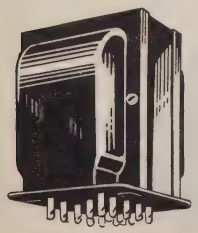
Stock No.	Pri. Volts	Sec. A.C. Load Volts	D.C. Volts Output After Filter: Condenser Input	D.C. Volts Output After Filter: Choke Input	D.C. M.A.	Type Mtg.	U.S.A. List Price
1800	115	550–0–550	550	400	200	D	$7.50
1801	"	675–0–675	650	500	250	"	9.00
1802	"	485–0–485	535	375	175	"	6.00
1803	"	750–0–750	Not Recommended for Condenser Input	580	200	"	9.00
1804	"	790–0–790	"	610	150	"	7.00
1805	"	980–0–980	"	750	350	F	17.50
1806	"	1280–0–1280	"	1000	300	"	17.50
1809	"	1550–0–1550 / 1800–0–1800	"	1250 or 1500	400	G	35.00
1810	"	2350–0–2350	"	2000	250	"	35.00
1811	115 or 230	1200–0–1200 / 2400–0–2400	"	1000 or 2000	500	H	54.00
1812	"	1750–0–1750 / 3500–0–3500	"	1500 or 3000	375	"	62.50

Transformers designed for 50-60 cycle operation. D.C. ratings are based on use of Utah chokes in 2 section filter, including the voltage drop through the rectifier tubes. If chokes other than Utah are used, the D.C. voltage may differ from the rating.

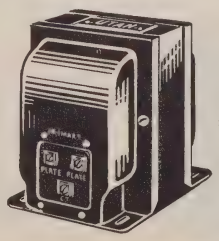
COMBINED PLATE AND FILAMENT TRANSFORMERS

Stock No.	Primary Volts	Secondary A.C. Load Volts	D.C. M.A.	Filament No. 1	Filament No. 2	Filament No. 3	Filament No. 4	Type Mtg.	U.S.A. List Price
1827	115	400–0–400	150	5V–3A*	2.5V–3A*	2.5V–5A*		K***	$6.00
2290	"	"	"	"	6.3V–1.5A*	6.3V–2.5A*		"	6.00
2291	"	380–0–380**	"	5V–3A	"	6.3V–2A*	6.3V–1.5A	"	7.00
2292	"	485–0–485	175	5V–3A*	6.3V–2A*	"		"	8.00
2320	110–120	550–0–550 (Tapped at 35V off center)	200	6.3 V.C.T.–3.5A	5V.C.T.–3A	5V–1.5A		D	9.00
2407	"	750–640–0–640–750	200	6.3 V.C.T.–2A	6.3V.C.T.1.5A	5V. C.T.–3A		D	11.50
2422	"	540–465–390–0–390–465–540	100	5.V–3A	6.3V–4A			D***	9.50

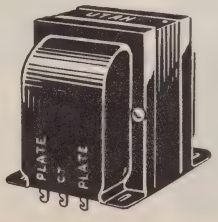
Transformers designed for 50–60 cycle operation. *Center tapped. **Tapped to produce 40 to 80 volts bias. ***Flexible Leads.



Type K
Overall size
5¼" H x 4" L
x3¾" to 5¼" W



Type D
Overall size
5¼" H x 4" L
x 3¾" to 5¼" W



Type A
Overall size
2⅜" H x 2" L
x 2" to 2¼" W

SWINGING CHOKES

Stock No.	D.C. M.A.	D.C. Res.	Insulation	Henries	Type Mtg.	U.S.A. List Price
4501	200	135	1500	5–28	B*	$4.50
4502	250	"	2000	5–42	C*	6.00
4503	300	80	3000	6–26	D*	7.00
4504	400	55	5000	4–20	"	10.00
4505	500	75	"	5–40	F	16.00

FILTER CHOKES

Stock No.	D.C. M.A.	D.C. Res.	Insulation	Henries	Type Mtg.	U.S.A. List Price
4506	2	4680	1000	160	A*	$2.50
4509	150	200	1500	13	B*	4.25
4510	200	135	"	9	"	4.50
4511	250	"	2000	7	C*	6.00
4512	250	160	"	6	D*	6.75
4513	300	80	3000	10	"	7.00
4514	400	55	5000	"	"	10.00
4515	500	75	"	13	F	16.00

Swinging or input chokes are recommended in all cases to insure adequate regulation and protection to rectifiers. Note: *Leads out bottom.

MICROPHONE — LINE — MIXER TRANSFORMERS

Stock Number	Primary	Secondary	Type Mounting	U.S.A. List Price
7800	200–0–200 Ohm D. B. Mike	Grid	A	$3.00
7804	200 Ohm Single Button Mike	"	"	3.00
7806	200 or 500 Ohm Line	"	B	4.00
7807	50–100–150 Ohm Line	"	"	4.00
7808	High Impedance Pickup	"	A	3.00
7812	" " "	200–500 Ohm Line	"	3.00

Above Transformers are Suitable for Public Address Equipment.

FILAMENT TRANSFORMERS

Stock No.	PRI. VOLTS	A. C. FILAMENT VOLTAGE AND CURRENT RATINGS			Type Mtg.	U.S.A. List Price
		FIL. No. 1	FIL. No. 2	FIL. No. 3		
2424	110-120	2.5V. @ 20.0A. C.T.	(10000 V. Insulation)		C	$8.50
2425	"	2.5V. @ 5.0A. "	(5000 V Insulation)		B	4.50
1821A	"	2.5V. @ 10.0A. "	" " "		"	5.50
1826	"	5.0V. @ 3.0A. "			"	3.25
2426	"	7.5V. @ 7.5A. "			C	5.00
2303	"	7.5V. @ 4.0A. C.T.	7.5V. @ 4.0A. C.T.		"	5.75
1831	"	5.0V. @ 12.0A. "	Eimac 100th's etc.		"	5.00
2297	"	5.0V. @ 20.0A. "	Eimac 250th's etc.		D	7.00
2296	"	6.3V. @ 5.0A. "			B	3.75
1819	"	7.5V. @ 6.5A. "			C	5.00
1817	"	10.0V. @ 6.5A. "			"	5.25
1830	"	10.0V. @ 8.0A. "			"	5.75
1823	"	5.0V. @ 3.0A. "	5.0V. @ 3.0A. C.T.		"	5.50
2298	"	7.5V. @ 6.5A. "	2.5V. @10.0A. "		D	7.00
1820	"	10.0V. @ 8.0A. "	2.5V. @ 10.0A. "	5000 V. Insulation	"	8.00
1833	"	2.5V. @ 10.0A. "	2.5V. @ 5.0A. "	2.5V. @ 5.0A. C.T. 5000 V. Insulation	"	7.25

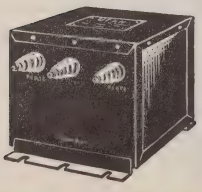
Stock No.	PRI. VOLTS	A. C. FILAMENT VOLTAGE AND CURRENT RATINGS			Type Mtg.	U.S.A. List Price
		FIL. No. 1	FIL. No. 2	FIL. No. 3		
1813	110-120	5.0V. @ 3.0A. C.T.	2.5V. @ 6.0A. C.T.	2.5V. @ 3.0A. C.T.	C	$6.00
1824	"	" " " "	5.0V. @ 3.0A. "	2.5V. @ 10.0A. C.T. 5000 V. Insulation	D	7.25
1834	"	" " " "	" " " "	5.0V. @ 3.0A. C.T.	C	6.00
2302	"	" " " "	6.3V. @ 3.0A. "	2.5V. @ 3.5A. C.T.	See Note	4.75
2300	"	" " " "	" " " "	" " "	C	6.00
1816	"	7.5V. @ 6.5A. "	2.5V. @ 6.0A. "	2.5V. @ 3.0A. C.T.	D	8.00
1814	"	7.5V. @ 3.0A. "	5.0V. @ 3.0A. "	2.5V. @ 8.0A. C.T.	C	6.00
1815	"	10.0V. @ 6.5A. "	7.5V. @ 4.0A. "	2.5V. @ 6.0A. C.T.	D	8.50
2322	"	2.5V. @ 10.0A. " 7500 Volt Ins.	7.5V. @ 3.5A. "		C	6.50

Transformers designed for 50-60 cycle operation. All Transformers insulated for 2500 volts unless otherwise specified. NOTE: Type "C" mounting with leads out bottom.

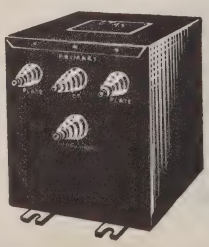
CLASS "A" AND "AB" INPUT TRANSFORMERS

Stock Number	Primary	Secondary	Type Mounting	U.S.A. List Price
7813	Single Plate Triode 56, 76, 6C5, etc.	Single Grid 1:3 Ratio	A*	$2.25
7814	" " " " " " "	P. P. Grid 1:3 Ratio	"	2.50
7815	P. P. Plates Triode	P. P. Grid 1:1½ Ratio	"	2.75
8425	Single or P. P. 56, 76, 6C5, etc.	P. P. 6L6's Class "AB"	B*	3.75
8426	Single or P. P. 56, 76, 6C5, 6F6, etc.	P. P. 6F6, etc., Class "AB"	"	3.75

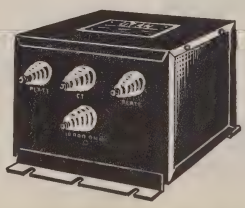
NOTE: *Leads out bottom.



Type F
Overall size
5" H x 7¼" L
x 9" W



Type H
Overall size
11" H x 9¼" L
x 11¼" W



Type G
Overall size
7" H x 8¼" L
x 10" W

CLASS "A," "AB" AND "B" OUTPUT TRANSFORMERS TO LINE OR SPEAKER

STOCK No.	PRIMARY	SECONDARY	TYPE MTG.	U.S.A. LIST PRICE
7817	10,000 Ohm Plate 30, 56, 6C5, 76, etc.	200 or 500 Ohm Line	A	$3.00
8444	Universal Class "A" Primary for Single, Push Pull, P. P. Par. Adjustable Impedance 3000 to 14,000 Ohms—40 Watts Audio	2-4-8-16 Ohm Voice Coil	B*	4.50
8445	Universal Class "AB" or "B" Primary for Push Pull, P. P. Par. Adjustable Impedance 3000 to 14,000 Ohms—40 Watts Audio	2-4-8-16 Ohm Voice Coil	B*	4.75
8446	Universal Class "A" Primary for Single, Push Pull, P. P. Par. Adjustable Impedance 3000 to 14,000 Ohms—40 Watts Audio	200 or 500 Ohm Line	B*	4.50
8447	Universal Class "AB" or "B" Primary for Push Pull, P. P. Par. Adjustable Impedance 3000 to 14,000 Ohms—40 Watts Audio	200 or 500 Ohm Line	B*	4.75
8448	Class "AB" 6L6, 6600 Ohms Plate to Plate 35 to 40 Watts Audio Power	4-8-16-500 Ohm	B	4.75
8449	Class "AB" 6L6, 3800 Ohms Plate to Plate 60 Watts Audio Power	4-8-16-500 Ohm	C	6.00

NOTE: *Primary leads out bottom; secondary lugs on side.

DRIVER TRANSFORMERS

STOCK No.	PRIMARY	SECONDARY	TYPE MTG.	U.S.A. LIST PRICE
7832	1-30, etc.	1-19 or 2-30, etc.	A	$3.00
7833	1-89, etc. Triode	1-79, etc.	A	3.00
8643	10,000 Ohm, 1-6N7, etc., Class "A"	1-6N7, etc., Class "B"	**A	3.00
7834	1-53, 6A6 Class A	1-53, 6A6, Class "B"	A	3.00
7835	1-46, 59, etc.	2-46, 59, etc.	B	3.75
7837	PP-45, 2A3, etc.	2-T55, 800, 825. etc	B	4.00
7838	PP-2A3, 250, etc.	2-100 TH., 830, etc.	B	4.00
8425*	PP-6C5, 56, etc.	2-6L6 Class "AB"	B	3.75
7839	PP-2A3, 250, etc.	2-03A, 830B	C	7.00

*Can be used for Grid Modulation. **Bottom leads.

LINE TO MODULATOR GRIDS

Stock No.	PRIMARY	SECONDARY	Type Mtg.	U.S.A. List Price
8428	500 Ohm (20 Watt Audio)	P. P. Grids Class "B" 03A-100TH.-354, etc.	C	$7.00
8427	500 " (30 " ")	P. P. Grids Class "B" HD03A-250TH. etc.	D	8.50
8096	500 " (30 " ")	2,500, 5,000, 7,500, 10,000 Ohms (100 M.A., D.C.)	C	7.50

AUTOFORMERS

STOCK No.	PRIMARY VOLTS	CYCLES	SECONDARY	LOAD WATTS	TYPE MTG.	U.S.A. LIST PRICE
2427	220	50—60	110 Volts	375	D	$ 9.50
2423	"	"	"	1125	F	16.00

NEW UNCASED FILAMENT TRANSFORMERS

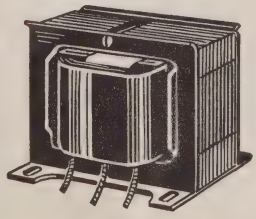
STOCK No.	PRIMARY VOLTS	SECONDARY VOLTS	SECONDARY AMPS.	INSULATION	TYPE MTG.	U.S.A. LIST PRICE
2481	115	2.5 C.T.	10	3000 Volts	L *	$2.50
2466	"	6.3 "	5	2000 "	" *	1.75
2468	"	5.2 "	4	" "	" *	1.65
2477	"	5.2 "	13	3000 "	" **	3.85
2478	"	2.5 "	5.25	2000 "	M	2.50
2479	"	7.5 "	4	" "	L *	2.75
2480	"	7.5 "	8	" "	" °	3.85

OUTPUT MODULATION TRANSFORMERS

STOCK No.	PRIMARY Tube Type	PRIMARY Imped.	SECONDARY Output Imped.	D.C. M.A.	WATTS AUDIO	TYPE MTG.	U.S.A. LIST PRICE
7841	1-19 1-1J6	10,000	500—3,000	50	5	A	$2.75
8644	1-6N7, 6A6	10,000	4,200	75	10	B	4.50
7842	2-250 2-46 or 59	5,800	3,300—5,000—6,250	125	20	C	6.00
8438	2-6L6 "AB"	6,600	2,500—5,000—7,500	150	35	C	7.00
8479	2-6L6 Class "AB" Fixed Bias	6,600 (3800 Plate to Plate)	500—2,500—5,000 7,500	200	60	D	9.00
8429	2-6L6 "AB" 2-35T	3,800	2,500—5,000—7,500	200	60	D	8.50
8666	2-T20	12,000	3,500—5,000—7,000 10,000	150	70	F	10.00
8441	Universal Triodes "Class B" or "Class AB"	8,000 to 10,000	4,000—6,000 8,000—10,000	300	100	F	20.00
8667	4-6L6	1,900 "Fixed Bias"	3,500—5,000—7,000 10,000	250	120	F	25.00
8668	4-T20 4-TZ20	6,000	3,500—5,000—7,000 10,000	300	140	F	26.00
7844	2-800 2-825 2-RK18 2-RK30 2-RK31	12,500	5,000—5,880	200	150	F	16.50
8669	2-TZ40	6,900	3,500—4,400—8,500	175	230	F	26.00
8442	Universal Heavy Duty Triodes "Class B" or "Class AB"	8,000 to 10,000	4,000—6,000 8,000—10,000	400	250	G	26.00
7846	2-03A 2-242A 2-830B	8,000	2,500—10,000	400	300	G	24.00
8440	2-HD03A 2-822 2-805	8,000	500*—4,000 6,000—8,000	600	500	G	40.00
8430	Universal Super Duty Triodes "Class B" or "Class AB"	8,000 to 10,000	4,000—6,000 8,000—10,000	500	600	H	70.00
8656	2-250TH	6,400	2,400—3,000—4,000	700	600	H	75.00

*Tap is one-quarter number of total turns, and is to be used for 25% modulation of a driver stage for cascade modulation.

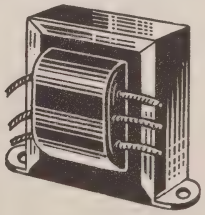
Transformers Listed Above are for Class "B" Operation Unless Otherwise Specified.



Style L

Overall size

L * 2⅝" H x 3" L x 2" W
L ° 3½" H x 2⅞" L x 2⅜" W
L ** 4" H x 3⅛" L x 2¼" W

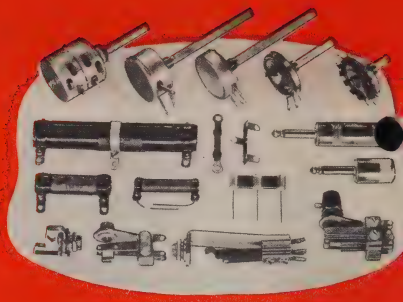


Style M

Overall size

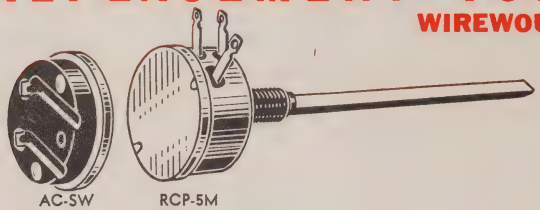
2⅝" H x 2¼" L x 1½" W

utah CARTER PARTS



REPLACEMENT VOLUME CONTROLS

WIREWOUND TYPE

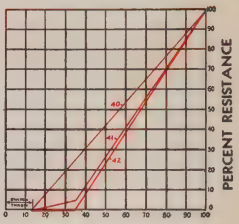


AC-SW RCP-5M

WIREWOUND TYPE

Fully enclosed, dustproof, with insulated contact arm.
BODY: 1 7/16" diameter, 11/16" depth behind panel
BUSHING: 3/8" diameter, 3/8" long.
SHAFT: 1/4" diameter, 3" long from bushing, flatted.
Mounts in single 3/8" hole
Switch when attached adds 5/16" to overall depth.

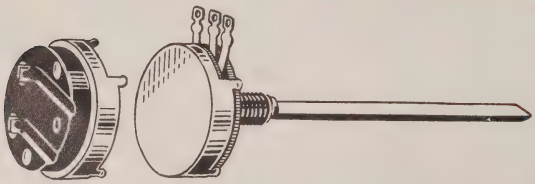
Dissipates 4 watts. High quality resistance wire, precision wound on treated bakelite strip. The resistance element can never loosen, being clamped in place over its entire length. Completely enclosed by dustproof cover. Demountable switch fastens on cover which is accurately located and fastened by two ears which bend over. This locks cover and switch so that switch can never slide out of place. Universal Shaft flatted full length. Each control supplied with knob insert, grounding terminal and two 1/2" brass nuts hex.



PERCENT OF CLOCKWISE ROTATION

TAPER CHART—WIREWOUND TYPES

NEW—IMPROVED CARBON TYPE

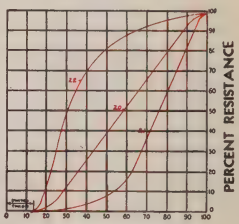


LP-SW RCP-50M

CARBON TYPE

Fully enclosed, dustproof, with insulated contact arm.
BODY: 1 7/16" diameter, 15/32" depth behind panel.
BUSHING: 3/8" diameter, 3/8" long.
SHAFT: 1/4" diameter, 3" long from bushing, flatted.
Mounts in single 3/8" hole.
Switch when attached adds 5/16" to overall depth.

Dissipates 2 watts. Improved carbon element produced by exclusive patented process. Highest quality graphite permanently bonded by bakelizing process, not merely sprayed. Accurate line - contact sliding shoe gives silent control which stays silent, life tests of 30,000 to 50,000 complete rotation cycles prove their lasting dependability. Completely enclosed, by dustproof cover which snaps in place. Demountable switch accurately located, cannot slide out of place. All elements insulated from cover and shaft. Universal shaft flatted full length. Each control supplied with knob insert, grounding terminal and two 1/2" hex. brass nuts.



PERCENT OF CLOCKWISE ROTATION

TAPER CHART—CARBON TYPES

4 WATT — WIREWOUND TYPE

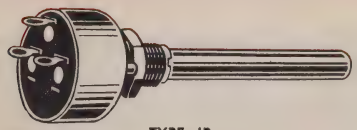
Stock No.	Value in Ohms	Taper	U.S.A. List Price	Stock No.	Value in Ohms	Taper	U.S.A. List Price
RCP-10	10	40	65c	RCP-2M	2,000	40	65c
RCP-20	20	"		RCP-3M	3,000	"	
RCP-30	30	"		RCP-4M	4,000	"	
RCP-50	50	"		RCP-5M	5,000	"	
RCP-100	100	"		RCP-5MT	5,000	41	
RCP-200	200	"		RCP-6M	6,000	40	
RCP-400	400	"		RCP-10M	10,000	40	
RCP-600	600	"		RCP-10MT	10,000	42	
RCP-800	800	"		RCP-15M	15,000	42	
RCP-1M	1,000	"					

2 WATT — CARBON TYPE

Stock No.	Value in Ohms	Taper	U.S.A. List Price
RCP-10MC	10,000	21	65c
RCP-15MC	15,000	"	
RCP-20M	20,000	"	
RCP-25M	25,000	20	
RCP-25MT	25,000	21	
RCP-30M	30,000	"	
RCP-50M	50,000	20	
RCP-75M	75,000	22	
RCP-100M	100,000	21	
RCP-200M	200,000	20	
RCP-250M	250,000	21	
RCP-500M	500,000	"	
RCP-1MG	1,000,000	"	

TYPE AC switch for wirewound controls—List price 30c. TYPE LP switch for carbon controls—List price 30c

BABY CARBON TYPE

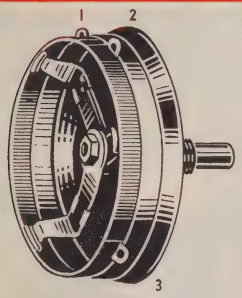


TYPE JP

Fully enclosed, dustproof, with insulated contact arm.
BODY: 1" diameter, 7/16" depth behind panel.
BUSHING: 3/8" diameter, 3/8" long.
SHAFT: 1/4" diameter, 1 1/2" long from bushing
Mounts in single 3/8" hole.
Not available with switch.

Stock No.	Value in Ohms	Taper	U.S.A. List Price	Stock No.	Value in Ohms	Taper	U.S.A. List Price
JP-1M	1,000	20	75c	JP-25M	25,000	20	75c
JP-2M	2,000	"		JP-25MT	"	21	
JP-3M	3,000	"		JP-30M	30,000	"	
JP-4M	4,000	"		JP-50M	50,000	20	
JP-5M	5,000	"		JP-75M	75,000	22	
JP-5MT	"	21		JP-100M	100,000	21	
JP-6M	6,000	20		JP-200M	200,000	20	
JP-10MT	10,000	21		JP-250M	250,000	21	
JP-10M	"	20		JP-500M	500,000	"	
JP-15M	15,000	21		JP-1MG	1,000,000	"	
JP-20M	20,000	"					

"T" AND "L" PAD WIREWOUND ATTENUATORS



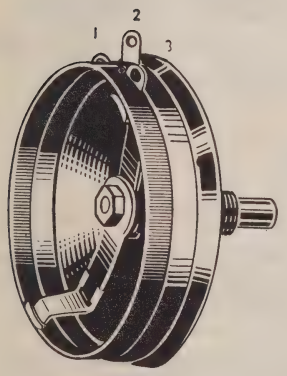
TYPE TA

For controlling volume in circuits of microphones, loudspeakers, phonograph pick-ups, mixers, audio and public address amplifiers and similar uses.

10 WATT "T" PADS OPEN FRAME TYPE

BODY: 2 11/16" diameter, 27/32" deep.
BUSHING: 7/16" diameter, 3/8" long.
SHAFT: 1/4" diameter, 7/16" long, from bushing.
Mounts in single 7/16" hole.
Supplied with one mounting nut and two insulating washers for 39/64" hole.
10 watts (+32.2 DB level*) for average program material.
5 watts (+29.2 DB level*) steady tone, in infinite attenuation or "silent" position.
Effective rotation: 82 degrees.

Stock No.	Impedance	U.S.A. List Price
TA-8	8 Ohms	$3.75
TA-16	16 "	3.75
TA-50	50 "	3.75
TA-200	200 "	3.75
TA-500	500 "	3.75
TA-1000	1000 "	3.75



TYPE LA

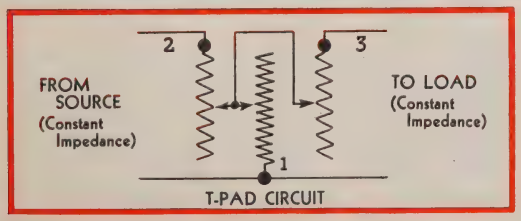
15-WATT "L" PADS OPEN FRAME TYPE

Dimensions and Description same as 10-Watt Pads

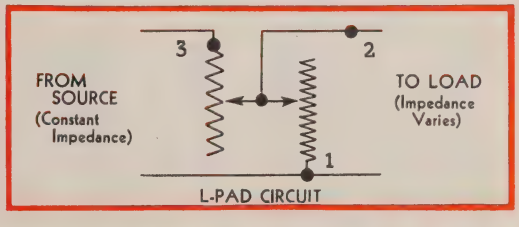
15 watts (+34.0 DB level*) for average program material.
7 1/2 watts (+31.0 DB level*) steady tone, in infinite attenuation or "silent" position.
Effective rotation: 142 degrees.

Stock No.	Impedance	U.S.A. List Price
LA-8	8 Ohms	$3.25
LA-16	16 "	3.25
LA-50	50 "	3.25
LA-200	200 "	3.25
LA-500	500 "	3.25
LA-1000	1000 "	3.25

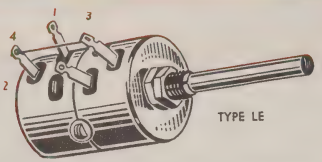
*Using ZERO LEVEL of 6 Milliwatts



T-PAD CIRCUIT



L-PAD CIRCUIT



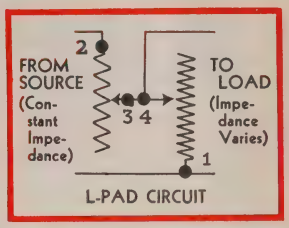
TYPE LE

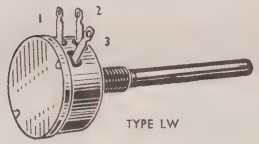
BODY: 1 7/16" diameter, 1 1/2" deep.—BUSHING: 3/8" diameter, 3/8" long.—SHAFT: 1/4" diameter, 1 1/2" long from bushing—Mount in Single 3/8" hole.—Supplied with two hex. mounting nuts.—8 watts (+31.2 DB level*) for average program material.—4 watts (+28.2 DB level*) steady tone, in infinite attenuation or "silent" position.—Effective rotation: 276 degrees. All electrical parts insulated from housing.

8-WATT "L" PADS ENCLOSED DUAL TYPE

Stock No.	Impedance	U.S.A. List Price
LE-8	8 OHMS	$2.50
LE-16	16 "	2.50
LE-50	50 "	2.50
LE-200	200 "	2.50
LE-500	500 "	2.50
LE-1000	1000 "	2.50

(*Using Zero level of 6 Milliwatts)





TYPE LW

WIREWOUND POTENTIOMETERS AND RHEOSTATS

The many years of continued preference for these pioneers of the small variable resistor field proves their dependability and high quality.

Resistance elements clamped permanently in place, in one-piece cadmium-plated all-metal frame. Open construction gives the maximum heat dissipation for their size. Contact arm grounded to bushing and frame.

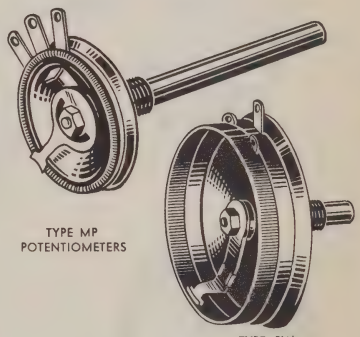
4-WATT "L" PADS ENCLOSED SINGLE TYPE

BODY: 1 7/16" diameter, 11/16" deep.
BUSHING: 3/8" diameter, 3/8" long.
SHAFT: 1/4" diameter, 1 1/2" long from bushing.
Mount in Single 3/8" hole.
Supplied with two brass hex Mounting nuts. All electrical parts insulated from housing. Effective rotation 120 degrees. 4 watts (+28.2 DB level*) for average program material. 1 3/4" watts (+24.6 DB level*) steady tone, in infinite attenuation or "silent" position. Connections: Same connections as for Type LA Open Frame Attenuator.

(Use Same L-Pad Circuit as on bottom right Page 27)

Stock No.	Impedance	U.S.A. List Price
LW-8	8 Ohms	$1.50
LW-16	16 Ohms	1.50
LW-50	50 Ohms	1.50
LW-200	200 Ohms	1.50
LW-500	500 Ohms	1.50
LW-1000	1000 Ohms	1.50

(*Using Zero Level of 6 Milliwatts)


TYPE MP POTENTIOMETERS

TYPE PW POTENTIOMETERS

3-WATT POTENTIOMETERS and RHEOSTATS

BODY: 1 7/16" diameter, 1/4" depth behind panel.
BUSHING: 3/8" diameter, 3/8" long.
SHAFT: 1/4" diameter, 1 1/2" long from bushing.
Pots: Three terminals, no off position.
Rheostats: 2 terminals, with off position.
Effective rotation: 285 degrees.
Mounts in single 3/8" hole.
Supplied with one hex. mounting nut, one flat and one swedged insulating washer for 7/16" hole.

STOCK VALUES IN OHMS

1/2	10	40	400
1	15	50	500
2	20	75	1,000
3	25	100	1,500
6	30	200	

Stock No. MP—Potentiometer, all sizes.
U.S.A. List Price.....50c
Stock No. MR—Rheostats, all sizes.
U.S.A. List Price.....50c

15-WATT POTENTIOMETERS

BODY: 2 11/16" diameter, 27/32" depth behind panel.
BUSHING: 7/16" diameter, 3/8" long.
SHAFT: 1/4" diameter, 7/16" long from bushing.
Three terminals, no off position. Effective rotation: 300 degrees.
Wirewound on bakelite strip.
Mounts in single 7/16" hole.
Supplied with one hex. mounting nut, two extruded insulating washers for 39/64" hole.

Stock No.	Resist. Ohms	Stock No.	Resist. Ohms
PW-100	100	PW-1M	1000
PW-150	150	PW-2M	2000
PW-200	200	PW-3M	3000
PW-250	250	PW-5M	5000
PW-300	300	PW-7500	7500
PW-400	400	PW-10M	10000
PW-500	500	PW-20M	20000
PW-800	800	PW-50M	50000

Stock No. PW—POTENTIOMETERS
U.S.A. List Price all sizes.....$1.50

25-WATT RHEOSTATS

Same size as PW 15-Watt type, but resistance element wound on asbestos-covered steel strip for greater heat dissipation.
Two terminals with off position.

Stock No.	Resist. in Ohms	Stock No.	Resist. in Ohms
SW-1	1	SW-60	60
SW-2	2	SW-75	75
SW-3	3	SW-100	100
SW-6	6	SW-150	150
SW-10	10	SW-200	200
SW-15	15	SW-250	250
SW-20	20	SW-300	300
SW-30	30	SW-400	400
SW-40	40	SW-500	500
SW-50	50		

Stock No. SW—RHEOSTATS
U.S.A. List Price, all sizes.....$1.25

UTAH VITREOUS ENAMELED RESISTORS

Utah Vitreous Enameled Resistors are perfectly protected against corrosion from salt spray, moisture, acids and alkalis, as their coating is genuine Vitreous Enamel, applied by a wet process, then fired in a furnace at a high temperature which fuses it into a hard glassy enamel which adheres permanently to the rugged porcelain tube core, resistance wire and terminals. The enamel protects the resistor mechanically also; there is no danger of a sharp tool accidentally piercing the coating. To be doubly protected, all Utah Vitreous Enameled Resistors receive two generous coats, each of which is separately fired.

Utah terminals cannot tear loose, being securely eyeleted around the tube. Resistance wire joined to terminal on opposite side of tube from lug, so severe bending of soldering lugs cannot break the wire. Junction of wire and terminal silver-soldered beneath the enamel for perfect conductivity.

High quality nickel-copper or nickel-chromium resistance alloy wire used, giving reliably accurate resistance values even when hot.

Adjustable Types have all the above dependable features of the fixed units; and in addition, the turns of the resistance wire are exposed in a narrow strip to make contact with the adjustable terminal band. Even in this partly exposed area, the wires are protected and anchored from shifting by an enamel which lies between the turns. The cadmium-plated steel adjustable terminal can be set at any desired value along the resistor, and clamped in place with a screw and nut. The wattage which may be safely dissipated at fractional settings is proportional to the effective length of the section being used. Thus an adjustable resistor rated at 50 watts overall, may safely take 25 watts over half of the winding.

10 WATT SIZES—Type CC

RATING: 10 Watts up to 2000 ohms in free air. Higher resistance units rated as listed in table. 1¾" long, ⅝" overall diameter. Has 1½" long #18 Ga. tinned wire pigtail leads.

Ohms	Max. Current in Mils	Max. Voltage
1	3,150	3
2	2,230	4.4
3	1,825	5.4
4	1,580	6.3
5	1,415	7
10	1,000	10
15	815	12
25	630	15
35	535	18
50	447	22
75	365	27
100	315	31
150	258	38
200	223	44
250	200	50
300	182	54
350	169	59
400	158	63
450	149	67
500	141	70
600	129	77
750	115	86
800	111	88
900	105	94
1,000	100	100
1,250	89	111
1,500	79	119
1,750	74	130
2,000	69	138
2,500	61	154
3,000	56	169
3,500	51	179
4,000	47	190
4,500	44	197
5,000	40	200
6,000	36	219
7,000	33	230
7,500	32	245
8,000	31	248
8,500	30	245
10,000	24	245
11,000	22	242
12,000	20	245
12,500	20	250
13,500	19	256
14,300	18	258
15,000	18	274
16,000	17	272
17,500	17	298
18,000	16	288
20,000	15	316
22,500	15	338
25,000	14	354
30,000	8	240
35,000	7	245
40,000	7	280
50,000	6	300

U.S.A. List Price.....40c

20 WATT SIZES—Type EE

RATING: 20 Watts up to 10,000 ohms in free air. Higher resistance units rated as listed in table. 2" long, 5/16" overall diameter, 5/16" inside diameter. Supplied with mounting brackets, 2¾" mounting centers. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
5	2,000	10	$0.65
10	1,415	14	.65
25	895	22	.65
50	633	31	.65
75	517	38	.65
100	448	44	.65
150	365	54	.65
200	316	63	.65
250	283	70	.65
300	258	77	.65
350	239	83	.65
400	223	89	.65
500	200	100	.65
650	175	114	.65
700	169	118	.65
750	163	122	.65
800	158	126	.65
850	153	130	.65
1,000	141	141	.65
1,200	129	155	.65
1,500	115	173	.65

20 WATT SIZES—TYPE EE Continued

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
1,750	107	187	$0.65
2,000	100	200	.65
2,250	94	212	.65
2,500	89	223	.65
2,750	85	234	.65
3,000	81	245	.65
3,500	75	264	.65
4,000	70	283	.65
4,500	66	300	.65
5,000	63	316	.65
6,000	57	346	.65
7,000	53	374	.65
7,500	51	387	.65
8,000	50	400	.65
10,000	43	436	.65
12,500	39	488	.65
15,000	34	520	.65
20,000	27	565	.75
25,000	25	630	.75
30,000	21	635	.75
35,000	18	648	.75
40,000	17	694	.75
50,000	11	550	.75
60,000	8	490	1.00
75,000	7	547	1.00
85,000	6.5	583	1.00
100,000	6	633	1.00

50 WATT SIZES—Type KK

RATING: 50 Watts up to 20,000 ohms in free air. Higher resistance units rated as listed in table. 4½" long, 11/16" overall diameter, ½" inside diameter. Supplied with mounting brackets, 5⅜" mounting centers. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
5	3,160	15	$1.10
10	2,240	22	1.10
25	1,420	35	1.10
50	1,000	50	1.10
75	815	61	1.10
100	707	70	1.10
150	577	86	1.10
200	500	100	1.10
250	447	110	1.10
500	316	158	1.10
750	258	193	1.10
800	250	200	1.10
1,000	224	224	1.10
1,500	183	274	1.10
2,000	158	316	1.10
2,500	142	354	1.10
3,000	129	387	1.10
4,000	112	448	1.10
5,000	100	500	1.10
7,500	81	600	1.25
8,000	79	632	1.25
10,000	70	700	1.25
12,000	64	768	1.25
15,000	57	850	1.25
20,000	48	960	1.25
25,000	43	1,070	1.25
35,000	33	1,150	1.45
50,000	25	1,250	1.45
75,000	16	1,200	1.45
100,000	12	1,200	1.45
125,000	11	1,375	2.00
150,000	9	1,350	2.25
175,000	7	1,225	2.25
200,000	7	1,400	2.50
250,000	6	1,500	2.75

100 WATT SIZES—Type NN

RATING: 100 Watts up to 20,000 ohms in free air. Higher resistance units rated as listed in table. 6½" long, 1¼" overall diameter, ¾" inside diameter. Supplied with mounting brackets, 7⅜" mounting centers. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
5	4,470	23	$1.50
10	3,160	31	1.50
25	2,000	50	1.50
50	1,414	70	1.50

100 WATT SIZES TYPE NN—Continued

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
75	1,155	85	$1.50
100	1,000	100	1.50
150	815	120	1.50
250	632	155	1.50
500	447	220	1.50
750	365	275	1.50
1,000	316	315	1.50
1,500	258	385	1.50
2,000	223	445	1.50
2,500	200	500	1.50
3,000	182	545	1.50
5,000	141	700	1.50
7,500	115	860	1.75
10,000	100	1,000	1.75
15,000	81	1,200	1.75
20,000	70	1,400	1.75
25,000	56	1,400	1.75
30,000	51	1,500	2.00
40,000	38	1,520	2.00
50,000	28	1,400	2.00
75,000	16	1,200	2.25
100,000	14	1,400	2.50

160 WATT SIZES—Type PP

RATING: 160 Watts up to 25,000 ohms in free air. Higher resistance units rated as listed in table. 8½" long, 1¼" overall diameter, ¾" inside diameter. Supplied with mounting brackets, 9⅜" mounting centers. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
5	5,660	33	$2.00
10	4,000	40	2.00
25	2,530	63	2.00
50	1,788	89	2.00
75	1,460	108	2.00
100	1,266	126	2.00
150	1,035	150	2.00
250	800	200	2.00
500	566	282	2.00
750	462	346	2.00
1,000	400	400	2.00
1,500	328	490	2.00
2,000	283	566	2.00
2,500	253	632	2.00
3,000	231	692	2.00
5,000	179	895	2.00
7,500	146	1,090	2.00
10,000	126	1,260	2.00
15,000	103	1,545	2.40
20,000	89	1,780	2.40
25,000	80	2,000	2.40
30,000	73	2,190	2.40
40,000	55	2,200	2.40
50,000	43	2,150	2.40
75,000	27	2,020	2.70
100,000	18	1,800	2.70

200 WATT SIZES—Type UU

RATING: 200 Watts up to 30,000 ohms in free air. Higher resistance units rated as listed in table. 10½" long, 1¼" overall diameter, ¾" inside diameter. Supplied with mounting brackets, 11⅜" mounting centers. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
5	6,310	31	$2.50
10	4,470	44	2.50
25	2,830	70	2.50
50	2,000	100	2.50
75	1,635	120	2.50
100	1,414	140	2.50
150	1,150	170	2.50
250	894	220	2.50
500	632	315	2.50
750	515	385	2.50
1,000	447	447	2.50
1,500	364	545	2.50
2,000	316	630	2.50
2,500	283	705	2.50
3,000	258	770	2.50
5,000	200	1,000	2.50
7,500	163	1,200	2.50
10,000	141	1,400	2.50
15,000	115	1,725	3.00
20,000	100	2,000	3.00
25,000	89	2,200	3.00
30,000	81	2,400	3.00
40,000	63	2,500	3.00
50,000	49	2,450	3.00
75,000	30	2,200	3.00
100,000	20	2,000	3.00

ADJUSTABLE VITREOUS ENAMEL RESISTORS

10-20-50-100-160-200 Watts

10 WATT SIZES—Type CCX

RATING: 10 Watts up to 2000 ohms in free air, entire element. Higher resistance units rated as listed in table. 1⅜" long, ⅜" overall diameter. Equipped with tinned lug type terminals at each end and one adjustable terminal.

Ohms	Max. Current in Mils	Max. Voltage
10	1,000	10
25	630	15
50	447	22
100	315	31
250	200	50
500	141	70
750	115	86
1,000	100	100
1,500	79	119
2,500	61	154
4,000	47	190
5,000	40	200
7,500	32	245
10,000	24	245

U.S.A. List Price.....60c

20 WATT SIZES—Type EEX

RATING: 20 Watts up to 10,000 ohms in free air, entire element. Higher resistance units rated as listed in table. 2" long ⅝" overall diameter, ⅛" inside diameter. Supplied with mounting brackets, 2¾" mounting centers and one adjustable terminal. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
10	1,415	14	$0.85
25	895	22	.85
50	633	31	.85
100	448	44	.85
250	283	70	.85
500	200	100	.85
750	163	122	.85
1,000	141	141	.85
1,500	115	173	.85
2,500	89	223	.85
4,000	70	283	.85
5,000	63	316	.85
7,500	51	387	.95
10,000	43	436	.95
15,000	34	520	.95
25,000	25	630	1.10

50 WATT SIZES—Type KKX

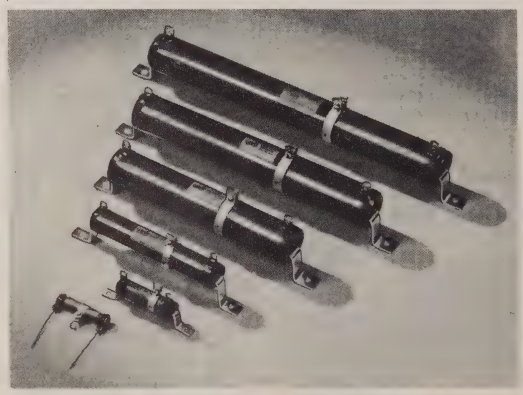
RATING: 50 Watts up to 20,000 ohms in free air, entire element. Higher resistance units rated as listed in table. 4½" long, 1⅛" overall diameter, ½" inside diameter. Supplied with mounting brackets, 5⅜" mounting centers, and one adjustable terminal. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
10	2,240	22	$1.35
25	1,420	35	1.35
50	1,000	50	1.35
100	707	70	1.35
250	447	110	1.35
500	316	158	1.35
750	258	193	1.35
1,000	224	224	1.35
1,500	183	274	1.35
2,500	142	354	1.35
4,000	112	448	1.35
5,000	100	500	1.35
7,500	81	600	1.50
10,000	70	700	1.50
15,000	57	850	1.50
25,000	43	1,070	1.50
40,000	35	1,400	1.70
50,000	25	1,250	1.70
75,000	15	1,200	2.00
100,000	12	1,200	2.00

100 WATT SIZES—Type NNX

RATING: 100 Watts up to 20,000 ohms in free air, entire element. Higher resistance units rated as listed in table. 6½" long, 1¼" overall diameter, ¾" inside diameter. Supplied with mounting brackets, 7⅜" mounting centers, and one adjustable terminal. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
25	2,000	50	$2.00
50	1,414	70	2.00
100	1,000	100	2.00
500	447	220	2.00
1,000	316	315	2.00
2,500	200	500	2.00
5,000	141	700	2.00
10,000	100	1,000	2.25
15,000	81	1,200	2.25
20,000	70	1,400	2.25
25,000	56	1,400	2.25
40,000	38	1,520	2.50
50,000	28	1,400	2.50
75,000	16	1,200	2.75
100,000	14	1,400	2.75



160 WATT SIZES—Type PPX

RATING: 160 Watts up to 25,000 ohms in free air, entire element. Higher resistance units rated as listed in table. 8½" long, 1¼" overall diameter, ¾" inside diameter. Supplied with mounting brackets, 9⅜" mounting centers, and one adjustable terminal. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
25	2,530	63	$2.50
50	1,788	89	2.50
100	1,266	126	2.50
500	566	282	2.50
1,000	400	400	2.50
2,500	253	632	2.50
5,000	179	895	2.50
10,000	126	1,260	2.50
15,000	103	1,545	2.90
20,000	89	1,780	2.90
25,000	80	2,000	2.90
40,000	55	2,200	2.90
50,000	43	2,150	2.90
75,000	27	2,020	3.25
100,000	18	1,800	3.25

200 WATT SIZES—Type UUX

RATING: 200 Watts up to 30,000 ohms in free air, entire element. Higher resistance units rated as listed in table. 10½" long, 1¼" overall diameter, ¾" inside diameter. Supplied with mounting brackets, 11⅜" mounting centers, and one adjustable terminal. Has soldering lug terminals.

Ohms	Max. Current in Mils	Max. Voltage	U.S.A. List Price
25	2,830	70	$3.00
50	2,000	100	3.00
100	1,414	140	3.00
500	632	315	3.00
1,000	447	447	3.00
2,500	283	705	3.00
5,000	200	1,000	3.00
10,000	141	1,400	3.00
15,000	115	1,725	3.50
20,000	100	2,000	3.50
25,000	89	2,200	3.50
40,000	63	2,500	3.50
50,000	49	2,450	3.50
75,000	30	2,200	3.50
100,000	20	2,200	3.50

EXTRA ADJUSTABLE TERMINALS

Type C—For model CCX	U.S.A.
Type E—For model EEX	List
Type K—For model KKX	Price
Type NPU—For models NNX-PPX-UUX	10c

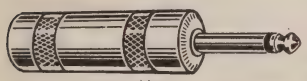
TWO-CONDUCTOR PLUGS

Tip and sleeve circuits; fit standard 2-conductor jacks. New types now stocked for wide range of uses. For headphones, microphones, speakers, musical instruments, medical and test equipment, many others.

Molded Bakelite Handles: Now stocked in both red and black as listed. Metal Shield Handles: Bright nickel-plated, with internal 2-layer high-quality tubular insulators, preventing short-circuits in handle.

TU-WAY PHONE PLUGS

No. 4



No. 7

A general-purpose type popular for years. Terminals flat with grooves for one or two phone tips, terminals or wires. Broad - headed knurled binding screws with screw driver slots. Handles 11/16" diameter, 2 1/16" long.

No. 4 Tu-Way Plug, black bakelite handle .....U.S.A. List Price $ .40
No. 13 Tu-Way Plug, red bakelite handle .....U.S.A. List Price .40
No. 7 Tu-Way Plug, shield handle U.S.A. List Price .90

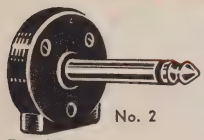
ONE-WAY PLUGS

Spring - grip terminals for one pair phone tips. No set screws. Stay-cord anchor. Handles 11/16" diameter, 1 1/2" long.

No. 3

No. 3 One-Way Plug, black bakelite handle .....U.S.A. List Price $ .60
No. 19 One-Way Plug, red bakelite handle .....U.S.A. List Price .60

No. 2 FLAT PLUG

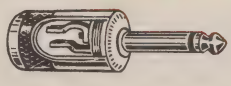


No. 2

Molded black bakelite body 1/4" thick, 1 1/16" diameter. Ideal for panel or wall-plate. Phone tips gripped by set-screws. Stay-cord anchor.

No. 2 Flat Plug.....U.S.A. List Price $ .65

No. 16 SHIELDED PLUG



No. 16

For plain or shielded cords. Broad flat tinned soldering terminals. Shield handle 11/16" diameter, 1" long.

No. 16 Shielded Plug.....U.S.A. List Price $ .85

No. 17 SHIELDED PLUG

Designed for cords with center conductor and braided return-conductor shield. Perfect anchoring; sleeve terminal bends to clamp shield braid after soldering in 5/32" hole. Shield handle 11/16" diameter, 1" long.

No. 17

No. 17 Shielded Plug.....U.S.A. List Price $ .90

No. 18 SHIELDED PLUG

Insulation 19/64" wide between tip and sleeve. Used with 3-conductor jack, other 2-conductor plugs short "ring" spring to sleeve; this plug leaves it open, for circuit switching. Also fits 2-conductor jacks. Shield handle 11/16" diameter, 1" long.

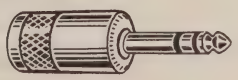
No. 18

No. 18 Shielded Plug.....U.S.A. List Price $ .85

THREE-CONDUCTOR PLUGS

Tip, ring, and sleeve circuits; fit standard 3-conductor jacks. For 2-button microphones, or circuits of 3 wires or 2 wires and separate shield. Bakelite handles 11/16" diameter, 1 1/2" long. Shield handles 11/16" diameter, 1" long, tubular insulator prevents short circuits.

No. 6



No. 9

No. 6 Plug, black bakelite handle U.S.A. List Price $ .85
No. 23 Plug, red bakelite handle..U.S.A. List Price .85
No. 9 Plug, shield handle.....U.S.A. List Price 1.35

PORTABLE JACKS

No. 12

No. 8

Used on end of extension cord. Fit 2-conductor plugs. Screw terminals take one pair phone tips, terminals or wires. Handles 11/16" diameter, 2 1/16" long. Shield handles have tubular insulator to prevent short circuits.

No. 12 Portable Jack, black bakelite handle .....U.S.A. List Price $ .60
No. 25 Portable Jack, red bakelite handle .....U.S.A. List Price .60
No. 8 Portable Jack, shield handle .....U.S.A. List Price 1.10

No. 103

LONG AND SHORT JACKS

No. 502-B

SHORT JACKS

Utah-Carter short jacks are small and compact, but do a full sized job. Depth behind panel is cut down by placing the tempered nickel-silver springs parallel to the panel. High quality sheet bakelite and tubular ebonite insulators are used throughout: No paper or fibre used in Utah-Carter jacks. Supplied with nickel-plated hex. mounting nut and nickel-plated washer.

LONG JACKS

The original long jacks adapted from telephone switchboard jacks. Long rugged phosphor-bronze springs parallel to the plug axis give precise action. These jacks take minimum panel mounting space, less than the short jacks. Supplied with nickel-plated hex. shoulder mounting nut and nickel-plated washer.

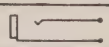
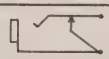
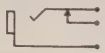
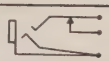
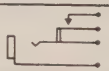
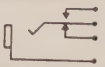
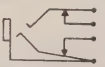
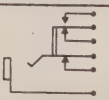
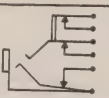
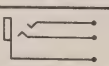
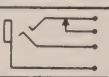
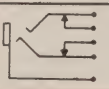
Short and long jacks mount in single 3/8" hole in panels up to 5/16" thick.

Fit of the plug in the jack is not affected by the thickness of the panel.

Fit all standard plugs in two and three-conductor types.

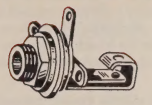
Strong bright cadmium plated steel frame.

All contacts between springs are fine silver, giving minimum contact resistance.

Circuits	Stock Nos.	Contact Arrangement	Long Jacks		Short Jacks	
			Stock No.	U.S.A. List Price	Stock No.	U.S.A. List Price
FOR 2-CONDUCTOR PLUGS, WITH TIP AND SLEEVE ONLY.						
	1—101 501	Open circuit	101	$0.50	501	$0.40
	102 502	Single closed circuit	102	.60	502	.55
	2A 102A 502A	Break contact on tip spring	102-A	.60	502-A	.55
	133 533	Sleeve spring; break contact on tip spring	133	.70	533	.65
	103 503	Separate make contact springs	103	.70	503	.65
	103A 503A	Break-make contacts on tip spring	103A	.70	503-A	.65
	104 504	Sleeve spring; break contacts on tip and sleeve springs	104	.80	504	.75
	104A 504A	Break contact on tip spring; separate make contact springs	104-A	.80	504-A	.75
	105 505	Break contact on tip spring; separate break-make contact springs	105	.90	505	.85
	106 506	Sleeve spring; break contacts on tip and sleeve springs; separate break contact springs	106	1.00	506	.95
FOR 3-CONDUCTOR PLUGS—WITH TIP, RING AND SLEEVE—(2-BUTTON MICROPHONE, ETC.)						
	2B 102B 502B	Open circuit	102-B	.60	502-B	.55
	103B 503B	Break contact on tip spring	103-B	.70	503-B	.65
	104B 504B	Break contacts on tip and ring springs	104-B	.80	504-B	.75

IMP SHORT JACKS

No. 1
Open Circuit Jack



No. 2-A
Closed Circuit Jack

No. 2-B
Microphone Jack

Utah-Carter Imp Short Jacks are popular because they combine compact size, highest quality and economical price. Unique, patented design makes them the smallest jack fitting standard plugs.

The new No. 2-B Microphone Imp Short Jack now gives these same desirable features in a 3-conductor jack, having tip, ring and sleeve circuits.

These jacks all have finest grade bakelite insulators, tempered nickel-silver springs, and bright nickel-plated threaded brass bushing.

Mount in single 3/8" hole in panels up to 3/16" thick without insulating washers, or 1/8" with insulating washers.

Supplied with one 1/2" hexagonal nickel plated mounting nut and washer, one flat and one swedged insulating washer for 7/16" panel hole.

No. 1 OPEN CIRCUIT IMP SHORT JACK. Has tip and sleeve circuits only. Electrical equivalent of Nos. 101 and 501.

No. 1 IMP SHORT JACK.....U.S.A. List Price $ .25

No. 2-A CLOSED CIRCUIT IMP SHORT JACK. Similar to No. 1, with an additional spring making contact with tip spring until plug is inserted. Electrical equivalent of Nos. 102-A and 502-A.

No. 2-A IMP SHORT JACK.....U.S.A. List Price $ .30

No. 2-B MICROPHONE IMP SHORT JACK. A new 3-conductor jack, having tip, ring and sleeve circuits. Fits standard 3-circuit microphone plugs. Electrical equivalent of Nos. 102-B and 502-B.

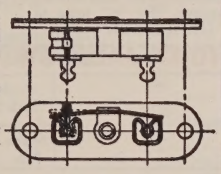
No. 2-B IMP SHORT JACK.....U.S.A. List Price $ .35

DUAL TIP JACKS

Utah-Carter Dual Tip Jacks are rugged simple units designed to receive two standard phone tips. It is these jacks which have been so widely used by large radio manufacturer's to provide phone-television sound connections to today's radio, or to provide earphone connection on the popular portable radios.

Three circuit arrangements are available and are carried in stock.

No. TU-11



No. TU-21

Dimensions	Circuit	Circuit Arrangement	Stock No.	USA List Price
Length 2 1/16" (Overall) Width 5/8" Depth 11/16" (Overall) Mounting Centers 1 11/16"		Open circuit type; simple receptacles only.	TU-11	$0.25
	A B	Automatic Shunt. (Receptacles normally short-circuited to each other; short circuit removed when tip inserted in receptacle A, by means of small fibre lifter.)	TU-21	$0.35
	A B	Closed Circuit Type. Similar to TU-21 but automatic shunt spring is permanently insulated from receptacle B, making it similar to No. 2A Jack switching action.	TU-31	$0.40

SHORT PUSH-BUTTON SWITCHES

NON-LOCKING AND LOCKING TYPES

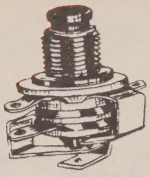
No. 433

	Stock Nos.	Contact Arrangement	Non-Locking Type	Locking Type	U.S.A. List Price
	422-M 422-AM	Single Make Contact	422-M	422-AM	$0.90
	422-B 422-AB	Single Break Contact	422-B	422-AB	$0.90
	433 433-A	Single Break-Make Contact	433	433-A	$1.00
	444-M 444-AM	Two Make Contacts	444-M	444-AM	$1.20

	Stock Nos.	Contact Arrangement	Non-Locking Type	Locking Type	U.S.A. List Price
	444-B 444-AB	Two Break Contacts	444-B	444-AB	$1.20
	666 666-A	Two Break-Make Contacts	666	666-A	$1.50
	555 555-A	Combination Break One and Make Two Contacts	555	555-A	$1.30
	676 676-A	Two-Make Before-Break Contacts	676	676-A	$1.65

Silver contacts for minimum resistance. High-quality nickel-silver springs. Bright cadmium-plated steel frame. Highest quality insulation used throughout. Mount in single 3/8" hole in panels up to 5/32". Supplied with 1/2" polished black bakelite button and set-screw, one nickel-plated hexagonal mounting nut and washer.

IMP PUSHBUTTON SWITCHES



IS-30 Series

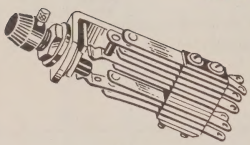
These switches are similar in general construction to the widely popular Utah-Carter Imp Short Jacks. Finest nickel-silver springs with integral contacts. High grade phenolic insulation. Body, nuts and washers bright nickel plated. Red or black Kolonite 1-piece shaft and button. Springs fully insulated from the mounting bushing and shaft.

Made in three circuit arrangements:

IS-10 Series: "Make" contact, single circuit normally open.
IS-20 Series: "Break" contact, single circuit normally closed.
IS-30 Series: "Break-Make" contacts, single circuit, double-throw.

Description	Circuit	Contact Arrangement	Red Pushbutton Stock Number	Black Pushbutton Stock Number	USA List Price
One-piece combined shaft and pushbutton. Mount in 3/8" hole in panels up to 1/32" thick. Supplied with one nickleplated hex nut and washer.		"Single Make"	IS-11	IS-13	$0.75
		"Single Break"	IS-21	IS-23	$0.75
		One "Break-Make"	IS-31	IS-33	$0.75

UTAH-CARTER JACK SWITCHES



No. 90

Rotary Two and Three Position—Long and Short Types.

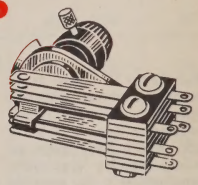
SHORT JACK SWITCHES

Similar in design to Utah-Carter short jacks, these switches are small and compact.

LONG JACK SWITCHES

Similar in design to Utah-Carter long jacks, these are full-size switches, but take less panel space than the short jack switches.

All rotary jack switches supplied with knob and pointer screw, one nickel-plated hex. mounting nut and nickel-plated washer. Fit 3/8" hole in panels up to 1/4" thick. All electrical parts fully insulated from frame.



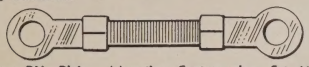
No. 366

UTAH-CARTER ROTARY LONG AND SHORT JACK SWITCHES

Circuits	Stock Nos.	Contact Arrangement	Long Jack Switches Stock No.	Long Jack Switches U.S.A. List Price	Short Jack Switches Stock No.	Short Jack Switches U.S.A. List Price
TWO POSITION SWITCHES						
	22 322	Single make (SPST)	22	$0.75	322	$0.70
	33 333	Single break-make (SPDT)	33	.90	333	.85
	44 344	Two makes (DPST)	44	1.00	344	.95
	55 355	One break-make, one make (1-SPDT-1-SPST) (Normally Open)	55	1.15	355	1.10
	66 366	Two break-makes (2-SPDT)	66	1.25	366	1.25
	660 306	Three makes (3-SPST—Normally Open)	660	1.25	306	1.25
	880 388	Four makes (4-SPST—Normally Open)	880	1.60	388	1.60
THREE POSITION SWITCHES						
	77 333-B	Single pole double throw, center off	77	.90	333-B	.85
	88 366-B	Two pole double throw, center off	88	1.25	366-B	1.20
	90 399-B	Three pole double throw, center off	90	1.60	399-B	1.55
	120 312-B	Four pole double throw, center off	120	2.00	312-B	1.95

½ WATT WIREWOUND RESISTORS

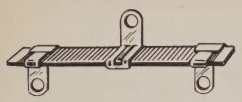
Long Life–Dependable Service–Fixed and Center Tapped Precision wound on flexible strips to meet varying mounting conditions.



Type RU—Plain. Mounting Centers when flat 1 9/16"

Stock Values in Ohms.		
1	15	200
2	20	400
3	25	500
4	30	600
6	40	700
8	50	800
10	100	1,000

Type RU Resistor — U.S.A. — List Price — 15c

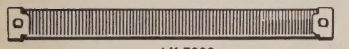


Type CU—Center Tapped, Mounting Centers End Terminals 1".

Stock Values in Ohms		
6	20	100
10	40	200
15	60	400

Type CU Resistor — U.S.A. — List Price — 20c

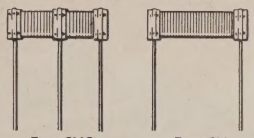
ATWATER KENT VOLUME CONTROL STRIPS



AK-7000
Used on Atwater Kent Models 55 and 60
U.S.A. List Price.....40c

AK-450
Used on Atwater Kent Models 37, 38, 40, 41, 42, 43, 44, 45, 46.
U.S.A. List Price 40c

2½ WATT WIREWOUND RESISTORS



Type SHC Type SH

Precision Wound on Bakelite Forms.
Size ½" x 1½" with 2½" Flexible leads.

Stock Values in Ohms				
1	6	18	50	750
2	8	20	100	1,000
3	10	25	200	2,000
4	12	30	300	3,000
5	15	40	500	

Type SH Resistor — Plain U.S.A. — List Price — 20c
Type SHC Resistor — Center Tapped — U.S.A. — List Price — 25c

Bushing length 3/8"
Shaft 5/16" from end of bushing.

IMP TAP SWITCH

Positive snap action—strong wiping contact grounded to shaft and bushing. In operation contact breaks between makes.

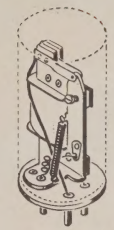
Type	No. of Positions	Type	No. of Positions
602	2 Points	608	8 Points
603	3 "	609	9 "
604	4 "	610	10 "
605	5 "	611	11 "
606	6 "	612	12 "
607	7 "		
U.S.A. List Price....50c		U.S.A. List Price....75c	

UTAH SENSITIVE D.C. RELAYS PLUG-IN TYPE

Low-priced, high quality plug-in relays. Dustproof, tamperproof, accurately adjusted for reliable operation, sealed in vibrator-type zinc housing, 3⅛" x 1½"

CAREFULLY ENGINEERED: Ratings overlap: For reliable operation from 1.2 to 120 volts or from 6 to 516 M.A., D.C., select relay from list.

CONTACTS: Fine silver for minimum contact resistance. 5 amperes, 115 volts A.C. non-inductive loads. For D.C. and inductive A.C. loads, arcing reduced by connecting 0.1 to 2 M.F. across contacts, with 10 to 500 ohms in series with condenser.



Types RA-A-"Break" Contacts (Normally Closed)

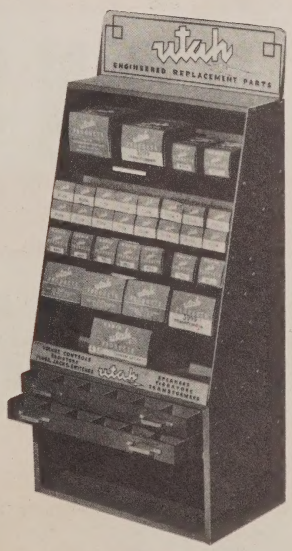
Types RA-B-"Make" Contacts (Normally Open)

Types RA-C-"Break-Make" Contacts (Single Pole Double Throw)

Stock No.	Contacts	U.S.A. List Price
2-Volt Relays—15 Ohms—1.2 to 7.75 volts—80 to 516 M.A.		
RAA-2	Single Break, normally closed	$2.25
RAB-2	Single Make, normally open	
RAC-2	Single Break-Make, S.P.D.T.	
6-Volt Relays—90 Ohms—3.15 to 19 Volts—35 to 210 M.A.		
RAA-6	Single Break, normally closed	2.25
RAB-6	Single Make, normally open	
RAC-6	Single Break-Make, S.P.D.T.	
32-Volt Relays—1000 Ohms—12 to 63 Volts—12 to 63 M.A.		
RAA-32	Single Break, normally closed.	2.50
RAB-32	Single Make, normally open	
RAC-32	Single Break-Make, S.P.D.T.	
110-Volt Relays—3000 Ohms—18 to 120 Volts—6 to 40 M.A.		
RAA-110	Single Break, normally closed	3.00
RAB-110	Single Make, normally open	
RAC-110	Single Break-Make, S.P.D.T.	

ALL-STEEL PARTS STOCK CABINET

- Overall size 39" high, 17" wide, 10" maximum depth
- 603 *Square* inches of storage space
- Each drawer contains 24 separate compartments for small parts such as resistors, condensers, volume controls, etc.
- Saves time and space — reduces costs — safeguards parts — indispensable to a service man
- Shipping weight — 26 pounds
- Net price to dealer $4.50 (cabinet only) F.O.B. Chicago



utah

SPEAKERS

VIBRATORS

TRANSFORMERS

UTAH-CARTER PARTS

1-40—25M

PRINTED IN U. S. A.

UTAH RADIO PRODUCTS COMPANY

CHICAGO, ILLINOIS U. S. A.